

=> file reg

FILE 'REGISTRY' ENTERED AT 13:42:13 ON 07 JUL 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 6 JUL 2004 HIGHEST RN 705249-96-3
DICTIONARY FILE UPDATES: 6 JUL 2004 HIGHEST RN 705249-96-3

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> file caplus

FILE 'CAPLUS' ENTERED AT 13:42:17 ON 07 JUL 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
American Chemical Society and is provided to assist you in searching
databases on STN. Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 7 Jul 2004 VOL 141 ISS 2
FILE LAST UPDATED: 6 Jul 2004 (20040706/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> file wpix

FILE 'WPIX' ENTERED AT 13:42:23 ON 07 JUL 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE LAST UPDATED: 2 JUL 2004 <20040702/UP>
MOST RECENT DERWENT UPDATE: 200442 <200442/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
<http://thomsonderwent.com/coverage/latestupdates/> <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER
GUIDES, PLEASE VISIT:
<http://thomsonderwent.com/support/userguides/> <<<

>>> NEW! FAST-ALERTING ACCESS TO NEWLY-PUBLISHED PATENT
DOCUMENTATION NOW AVAILABLE IN DERWENT WORLD PATENTS INDEX
FIRST VIEW - FILE WPIFV. FREE CONNECT HOUR UNTIL 1 MAY 2004.
FOR FURTHER DETAILS: <http://www.thomsonderwent.com/dwpifv> <<<

>>> NEW! IMPROVE YOUR LITIGATION CHECKING AND INFRINGEMENT
MONITORING WITH LITALERT. FIRST ACCESS TO RECORDS OF IP
LAWSUITS FILED IN THE 94 US DISTRICT COURTS SINCE 1973.
FOR FURTHER DETAILS:
<http://www.thomsonscientific.com/litalert> <<<

>>> THE DISPLAY LAYOUT HAS BEEN CHANGED TO ACCOMODATE THE
NEW FORMAT GERMAN PATENT APPLICATION AND PUBLICATION
NUMBERS. SEE ALSO:
<http://www.stn-international.de/archive/stnews/news0104.pdf> <<<

=> file compendex

FILE 'COMPENDEX' ENTERED AT 13:42:37 ON 07 JUL 2004

Compendex Compilation and Indexing (C) 2004

Elsevier Engineering Information Inc (EEI). All rights reserved.

Compendex (R) is a registered Trademark of Elsevier Engineering Information Inc.

FILE LAST UPDATED: 5 JUL 2004 <20040705/UP>

FILE COVERS 1970 TO DATE.

<<< SIMULTANEOUS LEFT AND RIGHT TRUNCATION AVAILABLE IN
THE BASIC INDEX >>>

=> file jicst

FILE 'JICST-EPLUS' ENTERED AT 13:42:42 ON 07 JUL 2004

COPYRIGHT (C) 2004 Japan Science and Technology Agency (JST)

FILE COVERS 1985 TO 5 JUL 2004 (20040705/ED)

THE JICST-EPLUS FILE HAS BEEN RELOADED TO REFLECT THE 1999 CONTROLLED
TERM (/CT) THESAURUS RELOAD.

=> d que

L63	1	SEA	FILE=REGISTRY	"BISPHENOL A"/CN
L65	3	SEA	FILE=REGISTRY	CRESYLGLYCIDYL ETHER
L66	2	SEA	FILE=REGISTRY	ISOCYANATE/CN
L67	79855	SEA	FILE=REGISTRY	PA/PCT
L80	30	SEA	FILE=CAPLUS	POLYAMINOIMIDAZOLINE
L83	1	SEA	FILE=REGISTRY	BUTANEDIOL/CN
L84	1	SEA	FILE=REGISTRY	POLYOXYMETHYLENES/CN
L86	1604	SEA	FILE=CAPLUS	DIPHENYLMETHANE-4,4-DIISOCYANATE
L88	1	SEA	FILE=REGISTRY	"DIISOBUTYL PHTHALATE"/CN
L89	1	SEA	FILE=REGISTRY	"METHYL METHACRYLATE"/CN
L91	23387	SEA	FILE=CAPLUS	L89
L92	1607	SEA	FILE=CAPLUS	L88
L93	21	SEA	FILE=CAPLUS	L84

L94 1360 SEA FILE=CAPLUS L83
L96 123396 SEA FILE=CAPLUS L67
L97 12320 SEA FILE=CAPLUS L63
L98 4 SEA FILE=CAPLUS L65
L99 1133 SEA FILE=CAPLUS L66
L100 80729 SEA FILE=CAPLUS METHYL METHACRYLATE OR L91
L101 1607 SEA FILE=CAPLUS DIISOBUTYL PHTALATE OR L92
L102 24 SEA FILE=CAPLUS POLYOXYMETHYLENEGLYCOL OR L93
L103 39073 SEA FILE=CAPLUS BUTANEDIOL OR L94
L105 1606570 SEA FILE=CAPLUS L96 OR ?AMINE?
L106 58842 SEA FILE=CAPLUS BISPHENOL A OR L97
L107 9 SEA FILE=CAPLUS CRESYLGLYCIDYL ETHER OR L98
L108 59411 SEA FILE=CAPLUS L99 OR ISOCYANATE
L109 16289 SEA FILE=CAPLUS MDI
L111 17737 SEA FILE=CAPLUS L109 OR L86
L113 66383 SEA FILE=REGISTRY PUR/PCT
L114 293352 SEA FILE=REGISTRY PACR/PCT
L115 15 SEA FILE=CAPLUS (L113 OR L114) AND L100 AND L101
L116 0 SEA FILE=CAPLUS L102 AND L103 AND L111 AND L101
L117 0 SEA FILE=CAPLUS L80 AND L114 AND L106 AND L108
L118 0 SEA FILE=CAPLUS GLYCIDYL ETHER AND L106 AND L108 AND L80
L119 0 SEA FILE=CAPLUS L106 AND L105 AND L108 AND L107
L124 0 SEA FILE=COMPENDEX (L115 OR L116 OR L117 OR L118 OR L119)
L125 15 DUP REM L115 L116 L117 L118 L119 L124 (0 DUPLICATES REMOVED)

=> d ti 1-15

YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS' - CONTINUE? (Y)/N:y

L125 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Viscosity modifier for plastisol composition, plastisol composition, and product and molded article each obtained therefrom

L125 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Production and use of porous polymeric monoliths in separation systems, especially in chromatography

L125 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Separation system, components of a separation system and methods of making and using them

L125 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Separation system, permeable polymeric components of a separation system and methods of making and using them

L125 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Polyolefin macromonomer, graft polymer obtained from the polyolefin macromonomer, and use thereof

L125 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Foamable poly(meth)acrylate plastisol and manufacturing process

L125 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Basic-medium-soluble polymeric packaging material for use in castable concrete, shotcrete, or grout

L125 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Olefin block copolymers with linking groups, production processes of the same and use thereof

L125 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Propylene polymer sheets with good high-frequency welding properties

L125 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Poly(meth)acrylate plastisols with improved plasticizer compatibility, procedure for their production as well as use

L125 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Multilayered plastic sheets with high-frequency-weldability

L125 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Polymeric molding compound

L125 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Effect of reaction parameters on the polymerization of **methyl methacrylate** with nickel acetylacetonate/methyl aluminoxane

L125 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Influence of plasticizers on the impact resistance of modified wood

L125 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Decalcomania adhesive

=> d all l125 1-15

YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS' - CONTINUE? (Y)/N:y

L125 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:60590 CAPLUS

DN 140:112228

ED Entered STN: 26 Jan 2004

TI Viscosity modifier for plastisol composition, plastisol composition, and product and molded article each obtained therefrom

IN Mae, Satoshi; Yonekura, Katsumi; Kasai, Toshihiro; Saiki, Sinji

PA Mitsubishi Rayon Co., Ltd., Japan

SO PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM C08K005-00

ICS C08L101-00; C09K003-00

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 38, 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 2004007605	A1	20040122	WO 2003-JP8837	20030711
	W: CN, JP, KR, US				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,				
	IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
PRAI	JP 2002-202431	A	20020711		
	JP 2003-131633	A	20030509		
OS	MARPAT 140:112228				
AB	The present invention relates to (i) a viscosity modifier containing ≥ 1				

component selected from (A) compds. having ≥ 1 carboxy or a salt thereof, alkoxy, and glycidyl group, (B) amine compds., and (C) metal chelate compds., (ii) a plastisol composition containing the viscosity modifier and

a polymer, (iii) a product having a coating layer obtained from the composition, and (iv) a molded article obtained by molding the composition

This viscosity modifier is highly effective in reducing the viscosity of a plastisol composition. With the modifier, a plastisol composition capable of giving an excellent cured article at low cost can be obtained. Thus, 25.0 parts Me methacrylate and 20.0 parts Bu acrylate were heated at 80°, Me methacrylate 470, iso-Bu methacrylate 280, and methacrylic acid 10 parts were added therein and polymerized to give a copolymer particle, 100 parts of which was mixed with 2 parts Ameen 8D and 80 parts diisononyl phthalate to give a plastisol with viscosity 4800 mPa-s and viscosity reducing ratio 75%, which was applied on a glass plate and heated to give a test piece with no bleed and no coloration.

ST viscosity modifier plastisol compn molded article; acrylic polymer Ameen viscosity modifier plastisol prepn

IT Sulfonic acids, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (alkanesulfonic, salts, Ph esters, plasticizers; viscosity modifiers for plastisol compns.)

IT Polyoxyalkylenes, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (amino-containing, viscosity modifiers; viscosity modifiers for plastisol compns.)

IT Amines, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (diamines, alkyl-substituted, viscosity modifiers; viscosity modifiers for plastisol compns.)

IT Toys
 (dolls; viscosity modifiers for plastisol compns.)

IT Polyoxyalkylenes, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (plasticizer; viscosity modifiers for plastisol compns.)

IT Amines, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (tertiary, alkyl-substituted, viscosity modifiers; viscosity modifiers for plastisol compns.)

IT Coating materials
 Plasticizers
 (viscosity modifiers for plastisol compns.)

IT Acrylic polymers, uses
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (viscosity modifiers for plastisol compns.)

IT Molded plastics, uses
 Plastics, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (viscosity modifiers for plastisol compns.)

IT Amines, uses
 Chelates
 RL: MOA (Modifier or additive use); USES (Uses)
 (viscosity modifiers; viscosity modifiers for plastisol compns.)

IT 77-90-7, Acetyltributyl citrate 84-69-5, Diisobutyl phthalate 117-81-7, Di-2-ethylhexyl phthalate 25322-69-4, Adeka P 700 28553-12-0, Diisononyl phthalate 94188-65-5, Mesamoll

RL: MOA (Modifier or additive use); USES (Uses)
(plasticizer; viscosity modifiers for plastisol compns.)

IT 110-86-1, Pyridine, uses 111-86-4, Armeen 8D 124-07-2, Octanoic acid,
uses 124-22-1, Armeen 12D 124-30-1, Armeen 18D 557-09-5, Octanoic
acid zinc salt 7173-62-8 13963-57-0, Alumichelate A 14782-75-3, ALCH
17927-72-9, TC 100 19443-16-4, Alumichelate D 27858-32-8, TC 750
31017-83-1, Amiet 105 79633-03-7, Homogenol 85626-36-4, ZC 540
176898-09-2, Armeen M 20

RL: MOA (Modifier or additive use); USES (Uses)
(viscosity modifier; viscosity modifiers for plastisol compns.)

IT 9011-14-7P, **Methyl methacrylate** homopolymer
25035-69-2P, Butyl acrylate-methacrylic acid-**methyl**
methacrylate copolymer 25086-15-1P, Methacrylic acid-
methyl methacrylate copolymer 25322-99-0P,
Butyl acrylate-butyl methacrylate-**methyl methacrylate**
copolymer 25608-33-7P, Butyl methacrylate-**methyl**
methacrylate copolymer 26044-94-0P, Isobutyl
methacrylate-**methyl methacrylate** copolymer
28262-63-7P, Butyl methacrylate-methacrylic acid-**methyl**
methacrylate copolymer 143382-09-6P 185303-42-8P
, Butyl acrylate-isobutyl methacrylate-methacrylic acid-**methyl**
methacrylate copolymer

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
(Technical or engineered material use); PREP (Preparation); USES (Uses)
(viscosity modifiers for plastisol compns.)

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Achilles Corp; JP 04-337345 A 1992 CAPLUS
- (2) Goodrich Co B F; GB 1480614 A 1974 CAPLUS
- (3) Goodrich Co B F; DE 2429825 A 1974 CAPLUS
- (4) Goodrich Co B F; US 3835116 A 1974 CAPLUS
- (5) Goodrich Co B F; JP 50-082154 A 1974
- (6) Henkel Kgaa; JP 09-504045 A 1998
- (7) Henkel Kgaa; JP 10-505373 A 1998
- (8) Henkel Kgaa; EP 724613 A1 1998 CAPLUS
- (9) Henkel Kgaa; EP 778870 A1 1998 CAPLUS
- (10) Henkel Kgaa; WO 9511284 A2 1998 CAPLUS
- (11) Henkel Kgaa; WO 9606897 A2 1998 CAPLUS
- (12) Nissan Motor Co Ltd; GB 2174994 A 1986 CAPLUS
- (13) Nissan Motor Co Ltd; JP 61-250070 A 1986 CAPLUS
- (14) Sekisui Chemical Co Ltd; JP 07-207100 A 1995 CAPLUS
- (15) Takeda Chemical Industries Ltd; JP 2000212237 A 2000 CAPLUS

L125 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:20552 CAPLUS

DN 140:78902

ED Entered STN: 11 Jan 2004

TI Production and use of porous polymeric monoliths in separation systems,
especially in chromatography

IN Allington, Robert W.; Xie, Shaofeng; Xu, Mingcheng; Jiang, Tao

PA Isco, Inc., USA

SO PCT Int. Appl., 185 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM B01D015-08

CC 47-2 (Apparatus and Plant Equipment)

Section cross-reference(s): 9, 37, 38, 64, 80

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004002603	A1	20040108	WO 2003-US20415	20030626
	W: JP				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
	US 2004000522	A1	20040101	US 2002-180350	20020626
	US 6749749	B2	20040615		
	US 2004020855	A1	20040205	US 2003-607080	20030625
PRAI	US 2002-180350	A	20020626		
	US 2003-607080	A	20030625		

AB Permeable polymeric monolithic materials are prepared by polymerization in place in

a column casing, suitable for chromatog. applications. In one embodiment, the permeable polymeric monolithic materials are polymerized while pressure is applied through a piston having a smooth piston head in contact with the polymerization mixture. The pressure eliminates wall effects and changes the structure in the column. Similarly, some columns that have a tendency to swell in the presence of aqueous solns. are pressurized while the solution is applied to prevent swelling and wall effect. This procedure also changes the structure in the column. The size of the separation effective openings can be controlled by the amount of the pressure and pores eliminated. Uniformity in the direction flow is improved by controlling polymerization with radiation rather than with conducted heat.

ST porous polymer monolith chromatog sepn system; protein sepn chromatog
porous polymer monolith

IT Liquid chromatographic columns
(capillary columns; production and use of porous polymeric monoliths in chromatog. separation systems)

IT Glass, uses

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(columns; production and use of porous polymeric monoliths in chromatog. separation systems)

IT Micromachines

(microelectromech. devices; production and use of porous polymeric monoliths in chromatog. separation systems)

IT Porous materials

(monoliths; production and use of porous polymeric monoliths in chromatog. separation systems)

IT Polymerization

(photopolymn., pressure; production and use of porous polymeric monoliths in chromatog. separation systems)

IT Vinyl compounds, uses

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(polymers, porous monoliths; production and use of porous polymeric monoliths in chromatog. separation systems)

IT Solvents

(porogens; production and use of porous polymeric monoliths in chromatog. separation systems)

IT Alcohols, uses

Polyoxyalkylenes, uses

RL: CPS (Chemical process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(porogens; production and use of porous polymeric monoliths in chromatog. separation systems)

IT Acrylic polymers, uses

RL: DEV (Device component use); TEM (Technical or engineered material

use); USES (Uses)
 (porous monoliths; production and use of porous polymeric monoliths in chromatog. separation systems)

IT Anion exchange liquid chromatography
 Chromatographic stationary phases
 HPLC
 Liquid chromatographic stationary phases
 Packing materials (beds)
 Polymerization catalysts
 (production and use of porous polymeric monoliths in chromatog. separation systems)

IT Polyoxyalkylenes, uses
 RL: CPS (Chemical process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
 (production and use of porous polymeric monoliths in chromatog. separation systems)

IT Aminoplasts
 RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
 (production and use of porous polymeric monoliths in chromatog. separation systems)

IT Peptides, processes
 Proteins
 RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
 (production and use of porous polymeric monoliths in chromatog. separation systems)

IT Polymerization
 (radiochem., pressure; production and use of porous polymeric monoliths in chromatog. separation systems)

IT 7631-86-9D, Silica, derivs.
 RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
 (capillary; production and use of porous polymeric monoliths in chromatog. separation systems)

IT 12597-68-1, Stainless steel, uses 12597-69-2, Steel, uses
 RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
 (columns; production and use of porous polymeric monoliths in chromatog. separation systems)

IT 84-11-7, Phenanthrenequinone 86-39-5, 9H-Thioxanthen-9-one, 2-chloro-90-93-7, Methanone, bis[4-(diethylamino)phenyl]- 90-94-8, Methanone, bis[4-(dimethylamino)phenyl]- 92-71-7, Oxazole, 2,5-diphenyl- 92-94-4, p-Terphenyl 846-63-9, Oxazole, 2-(1-naphthalenyl)-5-phenyl- 852-38-0, PBD 1315-09-9, Zinc selenide 75980-60-8, Phosphine oxide, diphenyl(2,4,6-trimethylbenzoyl)-
 RL: CAT (Catalyst use); USES (Uses)
 (photoinitiators; production and use of porous polymeric monoliths in chromatog. separation systems)

IT 64-17-5, Ethanol, uses 67-56-1, Methanol, uses 67-63-0, Isopropanol, uses 71-23-8, Propanol, uses 71-36-3, Butanol, uses 75-05-8, Acetonitrile, uses 84-69-5, Diisobutylphthalate 107-06-2, 1,2-Dichloroethane, uses 108-38-3, m-Xylene, uses 108-88-3, Toluene, uses 108-93-0, Cyclohexanol, uses 109-86-4, 2-Methyloxyethanol 110-63-4, 1,4-Butanediol, uses 110-71-4, 1,2-Dimethoxyethane 112-30-1, Decanol 112-53-8, Dodecanol 112-60-7, Tetra(ethylene glycol) 123-91-1, 1,4-Dioxane, uses 127-19-5, N,N-Dimethylacetamide 131-11-3, Dimethylphthalate 143-24-8, Tetra(ethylene glycol)dimethyl ether 540-84-1, 2,2,4-Trimethylpentane 9003-13-8, Polypropylene glycol

monobutyl ether 25322-69-4, Polypropylene glycol 36653-82-4,
1-Hexadecanol
RL: CPS (Chemical process); NUU (Other use, unclassified); PEP (Physical,
engineering or chemical process); PROC (Process); USES (Uses)
(porogens; production and use of porous polymeric monoliths in chromatog.
separation systems)

IT 31392-49-1, Silica, homopolymer
RL: DEV (Device component use); TEM (Technical or engineered material
use); USES (Uses)
(porous monoliths; production and use of porous polymeric monoliths in
chromatog. separation systems)

IT 78-67-1, AIBN 94-36-0, Benzoyl peroxide, uses 660-68-4, Diethylamine
hydrochloride
RL: CAT (Catalyst use); USES (Uses)
(production and use of porous polymeric monoliths in chromatog. separation
systems)

IT 75-50-3, Trimethylamine, uses 593-81-7, Trimethylamine hydrochloride
RL: CAT (Catalyst use); CPS (Chemical process); NUU (Other use,
unclassified); PEP (Physical, engineering or chemical process); PROC
(Process); USES (Uses)
(production and use of porous polymeric monoliths in chromatog. separation
systems)

IT 57-13-6, Urea, uses 64-19-7, Acetic acid, uses 68-12-2, DMF, uses
76-05-1, Trifluoroacetic acid, uses 79-14-1, Glycolic acid, uses
109-99-9, Tetrahydrofuran, uses 123-31-9, Hydroquinone, uses 142-68-7,
2H-Pyran, tetrahydro- 149-57-5, 2-Ethylhexanoic acid 2530-85-0,
3-(Trimethoxysilyl)propylmethacrylate 3926-62-3, Sodium chloroacetate
7727-37-9, Nitrogen, uses 25322-68-3, PEG
RL: CPS (Chemical process); NUU (Other use, unclassified); PEP (Physical,
engineering or chemical process); PROC (Process); USES (Uses)
(production and use of porous polymeric monoliths in chromatog. separation
systems)

IT 79-10-7D, Acrylic acid, polymers 80-62-6D, Methylmethacrylate,
polymers 97-88-1D, Butyl methacrylate, polymers 97-90-5D, Ethylene
dimethacrylate, polymers 100-42-5D, Styrene, polymers 106-91-2D,
Glycidyl methacrylate, polymers 142-90-5D, Lauryl methacrylate, polymers
681-84-5D, Silicic acid (H₄SiO₄), tetramethyl ester, polymers 868-77-9D,
2-Hydroxyethylmethacrylate, polymers 1321-74-0D, Divinylbenzene,
polymers 3454-07-7D, 4-Ethylstyrene, polymers 9003-53-6, Styrene,
homopolymer 9003-69-4, Divinylbenzene, homopolymer 9003-70-7,
Divinylbenzene-styrene copolymer 9011-05-6, Formaldehyde urea copolymer
9017-44-1, Divinylbenzene-2-hydroxyethylmethacrylate-styrene
copolymer 9052-45-3, Acrylic acid-divinylbenzene copolymer
9079-96-3, Divinylbenzene-2-hydroxyethylmethacrylate copolymer
15214-89-8D, 2-Acrylamido-2-methyl-1-propanesulfonic acid, polymers
25053-81-0, Ethylene dimethacrylate-2-hydroxyethylmethacrylate
copolymer 25067-05-4, Glycidyl methacrylate, homopolymer
25777-71-3, Ethylene dimethacrylate-methylmethacrylate copolymer
26794-61-6, Butyl methacrylate-ethylene dimethacrylate copolymer
31743-77-8, Ethylene dimethacrylate-glycidyl methacrylate
copolymer 32360-05-7D, Stearyl methacrylate, polymers 34439-19-5
, Acrylic acid-ethylene dimethacrylate-methylmethacrylate copolymer
35641-48-6, Butyl methacrylate-ethylene dimethacrylate-2-
hydroxyethylmethacrylate copolymer 58129-88-7 61181-29-1
, Ethylene dimethacrylate-lauryl methacrylate copolymer 98160-59-9
112218-44-7 122324-74-7, Divinylbenzene-stearyl
methacrylate copolymer 134239-98-8 212968-06-4D,
2-Acryloyloxyethyltrimethylammonium methyl sulfate, polymers
639068-28-3 639068-30-7 639826-04-3

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(production and use of porous polymeric monoliths in chromatog. separation systems)

IT 1407-47-2P, Angiotensin 2507-24-6P, Physalaemin 33507-63-0P, Substance P 58569-55-4P, Met-enkephalin 58822-25-6P, Leu-enkephalin

RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)

(production and use of porous polymeric monoliths in chromatog. separation systems)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Frechet; US 5334310 A 1994 CAPLUS

(2) Frechet; US 5728457 A 1998 CAPLUS

L125 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:100361 CAPLUS

DN 140:166093

ED Entered STN: 08 Feb 2004

TI Separation system, components of a separation system and methods of making and using them

IN Allington, Robert W.; Xie, Shaofeng; Jiang, Tao; Xu, Mingcheng

PA Isco, Inc., USA

SO U.S. Pat. Appl. Publ., 54 pp., Cont.-in-part of U.S. Ser. No. 180,350.

CODEN: USXXCO

DT Patent

LA English

IC ICM B01D015-08

NCL 210656000; 210143000; 210198200; 436161000; 422070000; 073061530

CC 48-1 (Unit Operations and Processes)

Section cross-reference(s): 9, 35, 38, 47, 80

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004020855	A1	20040205	US 2003-607080	20030625
	US 2004000522	A1	20040101	US 2002-180350	20020626
	US 6749749	B2	20040615		
	WO 2004002603	A1	20040108	WO 2003-US20415	20030626

W: JP

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,

IT, LU, MC, NL, PT, RO, SE, SI, SK, TR

PRAI US 2002-180350 A2 20020626

US 2003-607080 A 20030625

AB Permeable polymeric monolithic materials are prepared in a column casing.

In one embodiment, the permeable polymeric monolithic materials are polymerized while pressure is applied through a piston having a smooth piston head in contact with the polymerization mixture. The pressure eliminates wall effect and changes the structure in the column. Similarly, some columns that have a tendency to swell in the presence of aqueous solns. and pressurized while the solution is applied to prevent swelling and wall effect. This procedure also changes the structure in the column. The size of the separation effective openings can be controlled by the amount of

the

pressure and pores eliminated. Uniformity in the direction flow is improved by controlling polymerization with radiation rather than with

conducted

heat.

ST polymn pressure permeable polymer plug chromatograph column packing; ion cation anion exchange resin liq chromatog crosslinked porous; photopolymn

catalyst x ray uv crosslinking grafting stationary phase

IT Alcohols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(C1-C12, pore generating agents; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Porous materials
(cation exchangers; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Anion exchangers
Capillary tubes
Cation exchangers
Collecting apparatus
Crosslinking
Injectors
Ion exchange chromatography
Liquid chromatographic columns
Liquid chromatographic detectors
Pistons
Polymerization
Pressure
Reversed phase liquid chromatography
Ring opening
Scintillators
Solvents
Swelling, physical
UV lamps
X-ray sources (devices)
(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Peptides, processes
Proteins
RL: AMX (Analytical matrix); ANT (Analyte); PEP (Physical, engineering or chemical process); PYP (Physical process); ANST (Analytical study); PROC (Process)
(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Glass, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(column casing; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Fluoropolymers, uses
RL: DEV (Device component use); USES (Uses)
(column plug; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Pore size
(controlled during polymerization; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Polyoxyalkylenes, uses
Polyoxyalkylenes, uses
RL: NUU (Other use, unclassified); USES (Uses)
(d.p. 17, pore generating agent; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Polyoxyalkylenes, reactions
Polyoxyalkylenes, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(d.p. 227; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Compression

(during polymerization to control voids and pores; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Polymers, reactions
RL: DEV (Device component use); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(graft; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Integrated circuits
(in chromatog. column; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Reversed phase liquid chromatography
(mobile phases; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Functional groups
(modified to include hydrophobic or hydrophilic; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Etherification
Hydrolysis
(of prepared polymer; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Silylation
(of silica capillary tube; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Aminoplasts
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(permeable plug; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Catalysts
(photochem.; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Fluorescent substances
(photoinitiators; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Polymerization
Polymerization catalysts
(photopolymn.; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Vinyl compounds, reactions
RL: DEV (Device component use); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(polymers; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Polysiloxanes, reactions
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(polyurea-; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Glycols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(pore generating agents; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Anion exchangers

- Cation exchangers
(porous; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT Liquid chromatography
(preparation and characterization of system; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT Polymerization
(radical, separation after; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT Polymerization inhibitors
(removal of, prior to polymerization; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT Polysiloxanes, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(siloxane-; in permeable plug; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT Polyureas
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(siloxane-; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT Porous materials
(the prepared polymer plug; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT Degassing
(vacuum; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT Monomers
RL: RCT (Reactant); RACT (Reactant or reagent)
(vinyl; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT 1407-47-2P, Angiotensin
RL: ANT (Analyte); PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); ANST (Analytical study); PREP (Preparation); PROC (Process)
(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT 76-05-1, Trifluoroacetic acid, uses
RL: ARU (Analytical role, unclassified); CAT (Catalyst use); ANST (Analytical study); USES (Uses)
(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT 1185-53-1, Tris. hydrochloride 7558-80-7, Sodium phosphate (NaH₂PO₄)
RL: ARU (Analytical role, unclassified); MOA (Modifier or additive use); ANST (Analytical study); USES (Uses)
(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT 78-67-1, AIBN 92-94-4, p-Terphenyl 94-36-0, Benzoyl peroxide, uses 660-68-4 75980-60-8
RL: CAT (Catalyst use); USES (Uses)
(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT 64-19-7, Acetic acid, reactions 3926-62-3, Sodium chloroacetate

7664-93-9, Sulfuric acid, reactions

RL: CAT (Catalyst use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)

(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 31743-77-8P, Ethylene dimethacrylate-glycidyl methacrylate copolymer 65930-11-2P, Ethylene dimethacrylate-glycidyl methacrylate-methyl methacrylate copolymer 654051-89-5P

RL: DEV (Device component use); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 9003-53-6P, Polystyrene 25067-05-4P, Poly (glycidyl methacrylate)

RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 9006-20-6P, Acrylonitrile-divinyl benzene-styrene copolymer 26794-61-6P, Butyl methacrylate-ethylene dimethacrylate copolymer 654051-88-4P

RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 25087-26-7DP, Polymethacrylic acid, mixed ester copolymers

RL: DEV (Device component use); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 12597-68-1, Stainless steel, uses

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 92-52-4, Diphenyl, uses

RL: NUU (Other use, unclassified); USES (Uses)

(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 9003-69-4P, Divinyl benzene homopolymer 9052-45-3P, Acrylic acid-divinyl benzene copolymer 25053-81-0P, Ethylene dimethacrylate-hydroxyethyl methacrylate copolymer 25777-71-3P, Ethylene dimethacrylate-methyl methacrylate copolymer 34439-19-5P, Acrylic acid-ethylene dimethacrylate-methyl methacrylate copolymer 58129-88-7P, Ethylene dimethacrylate-glycidyl methacrylate-hydroxyethyl methacrylate copolymer 112218-44-7P 131954-31-9P 167401-97-0P 639068-28-3P 639068-30-7P 639068-32-9P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 9003-70-7P, Divinylbenzene-styrene copolymer 9017-44-1P, Divinylbenzene-hydroxyethyl methacrylate-styrene copolymer 9052-95-3P,

Divinylbenzene-ethylstyrene-styrene copolymer 9079-96-3P,
Divinylbenzene-hydroxyethyl methacrylate copolymer 61181-29-1P,
Ethylene dimethacrylate-lauryl methacrylate copolymer 122324-74-7P
, Divinylbenzene-stearyl methacrylate copolymer 134239-98-8P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 57-13-6, Urea, reactions 79-14-1, Glycolic acid, reactions 97-88-1, Butyl methacrylate 97-90-5, Ethylene dimethacrylate 100-42-5, Styrene, reactions 106-91-2, Glycidyl methacrylate 142-90-5, Lauryl methacrylate 681-84-5, Tetramethoxysilane 868-77-9, 2-Hydroxyethyl methacrylate 1120-71-4, Propane sultone 1310-73-2, Sodium hydroxide (NaOH), reactions 1321-74-0, Divinyl benzene, reactions 1633-83-6, Butane sultone 1663-39-4, tert-Butyl acrylate 2530-85-0, 3-(Trimethoxysilyl)propyl methacrylate 28106-30-1 32360-05-7, Stearyl methacrylate 212968-06-4, 2-(Acryloyloxyethyl)trimethylammonium methyl sulfate

RL: RCT (Reactant); RACT (Reactant or reagent)

(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 12597-69-2, Steel, uses

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(column casing; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 9002-84-0, TEFLON

RL: DEV (Device component use); USES (Uses)

(column plug; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 25322-69-4, Poly(propylene glycol)

RL: NUU (Other use, unclassified); USES (Uses)

(d.p. 17, pore generating agent; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 25322-68-3, Poly(ethylene oxide)

RL: RCT (Reactant); RACT (Reactant or reagent)

(d.p. 227; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 9003-13-8, Poly(propylene glycol) monobutyl ether

RL: NUU (Other use, unclassified); USES (Uses)

(d.p. 4.9, 16.2, 42.1, pore generating agents; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 593-81-7, Trimethylamine hydrochloride

RL: ARU (Analytical role, unclassified); CAT (Catalyst use); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent); USES (Uses)

(for functionalization of polymers; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 9002-07-7, Trypsin

RL: ARU (Analytical role, unclassified); ANST (Analytical study)

(inhibitor; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 9011-05-6

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(permeable plug; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 31694-16-3, PEEK

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(plug for column; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 62309-51-7, Propanol
RL: NUU (Other use, unclassified); USES (Uses)
(pore generating agent, pore generating agent; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 56-81-5, Glycerol, uses 64-17-5, Ethanol, uses 67-63-0, Isopropanol, uses 75-05-8, Acetonitrile, uses 84-69-5, Diisobutyl phthalate 107-06-2, 1,2-Dichloroethane, uses 108-38-3, m-Xylene, uses 108-88-3, Toluene, uses 108-93-0, Cyclohexanol, uses 109-86-4, 2-Methyloxyethanol 110-63-4, 1,4-Butanediol, uses 110-71-4, 1,2-Dimethoxyethane 111-46-6, Diethylene glycol, uses 112-60-7, Tetra(ethylene glycol) 123-91-1, 1,4-Dioxane, uses 127-19-5, N,N-Dimethylacetamide 131-11-3, Dimethyl phthalate 143-24-8, Tetra(ethylene glycol) dimethyl ether 540-84-1, 2,2,4-Trimethylpentane 7732-18-5, Water, uses 25917-35-5, Hexanol 27196-00-5, Tetradecanol 27342-88-7, Dodecanol 29063-28-3, Octanol 35296-72-1, Butanol 36653-82-4, 1-Hexadecanol 36729-58-5, Decanol
RL: NUU (Other use, unclassified); USES (Uses)
(pore generating agent; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 2507-24-6P, Physalaemin 33507-63-0P, Substance P 58569-55-4P, Met-Enkephalin 58822-25-6P, Leu-Enkephalin
RL: ANT (Analyte); PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); ANST (Analytical study); PREP (Preparation); PROC (Process)
(protein; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 7631-86-9, Silica, reactions
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(silica capillary; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 7647-14-5, Sodium chloride, uses
RL: ARG (Analytical reagent use); MOA (Modifier or additive use); ANST (Analytical study); USES (Uses)
(to condition resin; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

L125 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:3366 CAPLUS

DN 140:61622

ED Entered STN: 04 Jan 2004

TI Separation system, permeable polymeric components of a separation system and methods of making and using them

IN Xie, Shaofeng; Allington, Robert W.

PA Isco, Inc., USA

SO U.S. Pat. Appl. Publ., 43 pp.

CODEN: USXXCO

DT Patent

LA English

IC ICM B01D015-08

NCL 210656000; 210143000; 210198200; 422070000; 436161000; 210263000

CC 48-1 (Unit Operations and Processes)

Section cross-reference(s): 9, 35, 38, 47, 80

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004000522	A1	20040101	US 2002-180350	20020626
	US 6749749	B2	20040615		
	US 2004020855	A1	20040205	US 2003-607080	20030625
	WO 2004002603	A1	20040108	WO 2003-US20415	20030626
	W: JP				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
PRAI	US 2002-180350	A2	20020626		
	US 2003-607080	A	20030625		
AB	Permeable polymeric monolithic materials are prepared in a column casing. In one embodiment, the permeable polymeric monolithic materials are polymerized while pressure is applied through a piston having a smooth piston head in contact with the polymerization mixture. The pressure eliminates wall effect and changes the structure in the column. Similarly, some columns that have a tendency to swell in the presence of aqueous solns. and pressurized while the solution is applied to prevent swelling and wall effect. This procedure also changes the structure in the column. The size of the separation effective openings can be controlled by the amount of the pressure and pores eliminated.				
ST	polymn pressure permeable polymer plug chromatograph column packing; ion cation anion exchange resin liq chromatog crosslinked porous				
IT	Alcohols, uses				
	RL: NUU (Other use, unclassified); USES (Uses)				
	(C1-C12, pore generating agents; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)				
IT	Porous materials				
	(cation exchangers; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)				
IT	Anion exchangers				
	Capillary tubes				
	Cation exchangers				
	Collecting apparatus				
	Crosslinking				
	Injectors				
	Ion exchange chromatography				
	Liquid chromatographic columns				
	Liquid chromatographic detectors				
	Pistons				
	Polymerization				
	Pressure				
	Reversed phase liquid chromatography				
	Ring opening				
	Solvents				
	Swelling, physical				
	(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)				
IT	Peptides, processes				
	Proteins				
	RL: AMX (Analytical matrix); ANT (Analyte); PEP (Physical, engineering or chemical process); PYP (Physical process); ANST (Analytical study); PROC (Process)				
	(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)				
IT	Conalbumins				
	Ovalbumin				
	RL: ANT (Analyte); PEP (Physical, engineering or chemical process); PYP				

(Physical process); ANST (Analytical study); PROC (Process)
(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Glass, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(column casing; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Fluoropolymers, uses
RL: DEV (Device component use); USES (Uses)
(column plug; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Pore size
(controlled during polymerization; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Polyoxalkylenes, uses
RL: NUU (Other use, unclassified); USES (Uses)
(d.p. 17, pore generating agent; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Polyoxyalkylenes, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(d.p. 227; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Compression
(during polymerization to control voids and pores; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Reversed phase liquid chromatography
(mobile phases; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Functional groups
(modified to include hydrophobic or hydrophilic; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Etherification
Hydrolysis
(of prepared polymer; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Aminoplasts
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(permeable plug; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Vinyl compounds, reactions
RL: DEV (Device component use); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(polymers; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Polysiloxanes, reactions
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(polyurea-; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT Glycols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(pore generating agents; chromatog. separation system, permeable polymeric

- components of separation system and methods of making, and use)
- IT Anion exchangers
Cation exchangers
(porous; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT Liquid chromatography
(preparation and characterization of system; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT Polymerization
(radical, separation after; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT Polysiloxanes, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(silicate-, in permeable plug; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT Polyureas
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(siloxane-; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT Porous materials
(the prepared polymer plug; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT Degassing
(vacuum; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT Monomers
RL: RCT (Reactant); RACT (Reactant or reagent)
(vinyl; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT 76-05-1, Trifluoroacetic acid, analysis 1185-53-1, Tris.hydrochloride 7558-80-7, Sodium phosphate (NaH₂PO₄) 7632-05-5, Sodium phosphate
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT 78-67-1, AIBN 94-36-0, Benzoyl peroxide, uses 660-68-4
RL: CAT (Catalyst use); USES (Uses)
(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT 25087-26-7DP, Polymethacrylic acid, mixed ester copolymers
RL: DEV (Device component use); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT 12597-68-1, Stainless steel, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)
- IT 25053-81-0P, Ethylene dimethacrylate-hydroxyethyl methacrylate copolymer 25777-71-3P, Ethylene dimethacrylate-methyl methacrylate copolymer 30231-38-0P, Acrylic acid-glycidyl methacrylate-methyl methacrylate

copolymer **31743-77-8P**, Ethylene dimethacrylate-glycidyl methacrylate copolymer **34439-19-5P**, Acrylic acid-ethylene dimethacrylate-**methyl methacrylate** copolymer **65930-11-2P**, Ethylene dimethacrylate-glycidyl methacrylate-**methyl methacrylate** copolymer **167401-97-0P**
639068-28-3P 639068-30-7P 639068-32-9P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 9003-69-4P, Divinyl benzene homopolymer 9003-70-7P, Divinylbenzene-styrene copolymer **9017-44-1P**, Divinylbenzene-hydroxyethyl methacrylate-styrene copolymer 9052-95-3P, Divinylbenzene-ethylstyrene-styrene copolymer **9079-96-3P**, Divinylbenzene-hydroxyethyl methacrylate copolymer **25702-92-5P**, Butyl methacrylate-hydroxyethyl methacrylate copolymer **25776-83-4P**
39611-97-7P, Acrylic acid-tert-butyl acrylate copolymer **58129-88-7P**, Ethylene dimethacrylate-glycidyl methacrylate-hydroxyethyl methacrylate copolymer **61181-29-1P**, Ethylene dimethacrylate-lauryl methacrylate copolymer **122324-74-7P**, Divinylbenzene-stearyl methacrylate copolymer **134239-98-8P**

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 57-13-6D, Urea, polymer with poly(ethylene oxide), acetic acid, and tetramethoxysilane 64-19-7D, Acetic acid, polymer with poly(ethylene oxide), urea, and tetramethoxysilane 79-14-1, Glycolic acid, reactions 97-88-1, Butyl methacrylate 97-90-5, Ethylene dimethacrylate 100-42-5, Styrene, reactions 106-91-2, Glycidyl methacrylate 142-90-5, Lauryl methacrylate 681-84-5D, Tetramethoxysilane, polymer with poly(ethylene oxide), urea, and acetic acid 868-77-9 1120-71-4, Propane sultone 1310-73-2, Sodium hydroxide (NaOH), reactions 1321-74-0, Divinyl benzene, reactions 1633-83-6, Butane sultone 3926-62-3, Sodium chloroacetate 7664-93-9, Sulfuric acid, reactions 28106-30-1, Ethylstyrene 32360-05-7, Stearyl methacrylate 212968-06-4, 2-(Acryloyloxyethyl)trimethylammonium methyl sulfate

RL: RCT (Reactant); RACT (Reactant or reagent)

(chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 12597-69-2, Steel, uses

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(column casing; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 9002-84-0, TEFLON

RL: DEV (Device component use); USES (Uses)

(column plug; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 25322-69-4, Poly(propylene glycol)

RL: NUU (Other use, unclassified); USES (Uses)

(d.p. 17, pore generating agent; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 25322-68-3, Poly(ethylene oxide)

RL: RCT (Reactant); RACT (Reactant or reagent)

(d.p. 227; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 9003-13-8, Poly(propylene glycol) monobutyl ether

RL: NUU (Other use, unclassified); USES (Uses)
(d.p. 4.9, 16.2, 42.1, pore generating agents; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 593-81-7, Trimethylamine hydrochloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(for functionalization of polymers; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 9002-07-7, Trypsin
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(inhibitor; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 9011-05-6
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(permeable plug; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 31694-16-3, PEEK
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(plug for column; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 62309-51-7, Propanol
RL: NUU (Other use, unclassified); USES (Uses)
(pore generating agent, pore generating agent; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 56-81-5, Glycerol, uses 64-17-5, Ethanol, uses 67-63-0, Isopropanol, uses 75-05-8, Acetonitrile, uses 84-69-5, Diisobutyl phthalate 107-06-2, 1,2-Dichloroethane, uses 108-38-3, m-Xylene, uses 108-88-3, Toluene, uses 108-93-0, Cyclohexanol, uses 109-86-4, 2-Methoxyethanol 110-63-4, 1,4-Butanediol, uses 110-71-4, 1,2-Dimethoxyethane 111-46-6, Diethylene glycol, uses 112-60-7, Tetra(ethylene glycol) 123-91-1, 1,4-Dioxane, uses 127-19-5, N,N-Dimethylacetamide 131-11-3, Dimethyl phthalate 143-24-8, Tetra(ethylene glycol) dimethyl ether 540-84-1, 2,2,4-Trimethylpentane 7732-18-5, Water, uses 25917-35-5, Hexanol 27196-00-5, Tetradecanol 27342-88-7, Dodecanol 29063-28-3, Octanol 35296-72-1, Butanol 36653-82-4, 1-Hexadecanol 36729-58-5, Decanol
RL: NUU (Other use, unclassified); USES (Uses)
(pore generating agent; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

IT 7647-14-5, Sodium chloride, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(to condition resin; chromatog. separation system, permeable polymeric components of separation system and methods of making, and use)

RE.CNT 130 THERE ARE 130 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Advertisement; Genetic Engineering News 1993
(2) Afeyan; US 5019270 A 1991 CAPLUS
(3) Afeyan; US 5228989 A 1993 CAPLUS
(4) Afeyan; US 5306426 A 1994 CAPLUS
(5) Afeyan; US 5384042 A 1995 CAPLUS
(6) Afeyan; US 5389449 A 1995 CAPLUS
(7) Afeyan; US 5503933 A 1996
(8) Afeyan; US 5552041 A 1996 CAPLUS
(9) Afeyan; US 5605623 A 1997 CAPLUS
(10) Afeyan; US 5833861 A 1998 CAPLUS
(11) Afeyan, N; J. Chromatography 1990, V519, P1 CAPLUS

- (12) Afeyan, N; J. of Chromatography 1991, V544, P267 CAPLUS
- (13) Anon; GB 1188736 1970 CAPLUS
- (14) Anon; CZ 211743 1983
- (15) Anon; EP 0101982 1984 CAPLUS
- (16) Anon; EP 0180321 A2 1986 CAPLUS
- (17) Anon; EP 0231684 A1 1987 CAPLUS
- (18) Anon; DE 3543348 A1 1987 CAPLUS
- (19) Anon; EP 0129295 B2 1988 CAPLUS
- (20) Anon; EP 0264984 A1 1988 CAPLUS
- (21) Anon; EP 0282177 A2 1988 CAPLUS
- (22) Anon; JP 63-84641 1988 CAPLUS
- (23) Anon; EP 0320023 A2 1989 CAPLUS
- (24) Anon; WO 8907618 1989 CAPLUS
- (25) Anon; EP 0399318 A1 1990 CAPLUS
- (26) Anon; DE 3900272 A1 1990 CAPLUS
- (27) Anon; WO 9007965 1990 CAPLUS
- (28) Anon; NL 6803739 1991
- (29) Anon; EP 0534567 A2 1993 CAPLUS
- (30) Anon; EP 0407560 B1 1995 CAPLUS
- (31) Anon; DE 4333821 A1 1995 CAPLUS
- (32) Anon; DE 4334351 A1 1995 CAPLUS
- (33) Anon; WO 9522555 1995 CAPLUS
- (34) Anon; EP 0813062 A2 1997 CAPLUS
- (35) Anon; EP 0852334 A1 1998 CAPLUS
- (36) Anon; WO 0015321 1999 CAPLUS
- (37) Anon; WO 9915024 1999 CAPLUS
- (38) Anon; WO 9944053 1999 CAPLUS
- (39) Anon; WO 0015778 2000 CAPLUS
- (40) Anon; WO 0052455 2000 CAPLUS
- (41) Anon; WO 0157263 A1 2001 CAPLUS
- (42) Anon; WO 0193974 A1 2001 CAPLUS
- (43) Anon; WO 0193974 A1 2001 CAPLUS
- (44) Anon; Analytical Chemistry V72(18), P4386
- (45) Anon; High Tech Separations News 2001, V14(2)
- (46) Anon; Journal of Chromatography A 1999, V865, P169
- (47) Bergot; US 5183885 A 1993 CAPLUS
- (48) Bixler; US 3598728 A 1971 CAPLUS
- (49) Braun, T; Analytica Chimica Acta 1978, V99, P1 CAPLUS
- (50) Brownlee; US 4283280 A 1981
- (51) Brownlee; US 4313828 A 1982
- (52) Brownlee; US RE31974 E 1985
- (53) Cooper, A; Separation Science 1976, V11(1), P39 CAPLUS
- (54) Corso; US 6318157 B1 2001 CAPLUS
- (55) Elderfield, H; Science 2002, V296, P1618 CAPLUS
- (56) Frechet; US 5130343 A 1992 CAPLUS
- (57) Frechet; US 5306561 A 1994 CAPLUS
- (58) Frechet; US 5334310 A 1994 CAPLUS
- (59) Frechet; US 5453185 A 1995 CAPLUS
- (60) Frechet; US 5728457 A 1998 CAPLUS
- (61) Fuller; US 3878092 A 1975 CAPLUS
- (62) Goldberg; US 4102746 A 1978 CAPLUS
- (63) Goldberg; US 4169014 A 1979 CAPLUS
- (64) Good; US 3808125 A 1974 CAPLUS
- (65) Grasselli; Nuclear Instruments and Methods in Physics Research B V185(1001), P254
- (66) Hansen; US 4464240 A 1984 CAPLUS
- (67) Hansen; US 4465571 A 1984 CAPLUS
- (68) Hatch; US 6238565 B1 2001 CAPLUS
- (69) Herman, D; J. Chromatographic Science 1982, V20, P55 CAPLUS

- (70) Hileman, F; Analytical Chemistry 1973, V45(7), P1126 CAPLUS
- (71) Hjerten; US 5135650 A 1992 CAPLUS
- (72) Hjerten; US 5645717 A 1997 CAPLUS
- (73) Hjerten; US 5814223 A 1998 CAPLUS
- (74) Hjerten; US 5916445 A 1999 CAPLUS
- (75) Hjerten, S; J. Chromatogr 1989, V473, P273 CAPLUS
- (76) Hjerten, S; J. of Chromatography 1988, V457, P165 CAPLUS
- (77) Hjerten, S; Makromol. Chrm., Macromol. Symp 1988, V17, P349 CAPLUS
- (78) Horak, D; Polymer 1991, V32(6), P1135 CAPLUS
- (79) Hradil, J; J. of Chromatography 1989, V475, P209 CAPLUS
- (80) Ito; US 4430216 A 1984 CAPLUS
- (81) Ival, O; J. of Cellular Plastics 1973, V9, P25
- (82) Jia-Li Liao; Analytical Biochemistry 1996, V241, P195
- (83) Jia-Li Liao; Analytical Biochemistry 1996, V234(1), P27
- (84) Jia-Li Liao; J. of Chromatography 1991, V586, P21
- (85) Kalal; US 4031037 A 1977 CAPLUS
- (86) Kamiyama; US 4447328 A 1984 CAPLUS
- (87) Kiniwa; US 4747956 A 1988 CAPLUS
- (88) Kobashi; US 4565832 A 1986 CAPLUS
- (89) Liao; US 5647979 A 1997 CAPLUS
- (90) Liao; US 5935429 A 1999 CAPLUS
- (91) Lukas; US 4340483 A 1982 CAPLUS
- (92) Lynn, T; J. Chromatographic Science 1974, V12, P76 CAPLUS
- (93) Millipore Corp.; Brochure: "MemSep Chromatography Cartridges"
- (94) Millipore Corp.; Brochure: "ConSep LC 100 System"
- (95) Moriguchi; US 4913812 A 1990 CAPLUS
- (96) Nakajima; US 4486311 A 1984 CAPLUS
- (97) Navratil, J; American Lab. 1977, V9(10), P38 CAPLUS
- (98) Navratil, J; Analytical Chemistry 1971, V49(14), P2260
- (99) Pall; US 3246767 A 1966 CAPLUS
- (100) Pall; US 3353682 A 1967 CAPLUS
- (101) Pelzbauer, Z; J. Chromatogr 1979, V171, P101 CAPLUS
- (102) Peska; US 4794177 A 1988 CAPLUS
- (103) Peters, E; Analy. Commun. 1998, V35, P83 CAPLUS
- (104) Pretorius; US 3796657 A 1974
- (105) Price; US 5439593 A 1995 CAPLUS
- (106) Quentin; US 4087391 A 1978
- (107) Reusch, J; Konigsteiner Chromatographietage 1991, P158
- (108) Ross, W; Advan. Chromatogr. Proc. Int'l Symp. 6th 1970
- (109) Ross, W; J. of Chromatographic Science 1970, V8, P386 CAPLUS
- (110) Ross, W; Separation and Purification Methods 1974, V3(1), P111 CAPLUS
- (111) Salyer, I; 163rd National ACS Meeting 1972
- (112) Saulentechnik/Knauer; Brochure:Quick Disk
- (113) Selsor; US 3696061 A 1972 CAPLUS
- (114) Slingsby; US 6248798 B1 2001 CAPLUS
- (115) Snyder, L; Introduction to Modern Liquid Chromatography, Second Edition 1979, P183
- (116) Sun, X; Journal of Chromatography A 2002, V943, P209 CAPLUS
- (117) Svec; US 4889632 A 1989 CAPLUS
- (118) Svec; US 4923610 A 1990 CAPLUS
- (119) Svec; US 4952349 A 1990 CAPLUS
- (120) Tennikova, T; J. of Liquid Chromatogr. 1990, V13(1), P63 CAPLUS
- (121) Usmani, A; J. Macromol. Sci.-Chem 1983, V9, P1237
- (122) Valentin; US 3954608 A 1976 CAPLUS
- (123) Wagu; US 4497710 A 1985 CAPLUS
- (124) Wang; US 5767387 A 1998 CAPLUS
- (125) Xie, S; 217th ACS National Meeting in Anaheim 1999
- (126) Xie, S; High-Speed Bioseparation with Monolithic Columns, Bioanalytical Separation Session, PITTCON2001 2001, Poster No. 1659P

- (127) Xie, S; Poster Presentation "Applications of Polymeric Monolith Columns for Fast Bioseparation"
- (128) Xie, S; Poster Presentation "High Throughput Bioseparations in Monolithic Ion Exchangers"
- (129) Xie, S; Poster Presentation "Monolithic Macroporous Poly(Styrene-co-Divinylbenzene) Columns for Rapid or High Throughput Reversed-Phase Separation of Proteins and Peptides" 1999
- (130) Xie, S; Rapid Bio-separations in Columns with Monolithic Separation Media 2000

L125 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:200107 CAPLUS

DN 140:218277

ED Entered STN: 12 Mar 2004

TI Polyolefin macromonomer, graft polymer obtained from the polyolefin macromonomer, and use thereof

IN Kaneko, Hideyuki; Kojoh, Shin-Ichi; Kawahara, Nobuo; Matsuo, Shingo; Matsugi, Tomoaki; Saito, Junji; Matsuura, Sadahiko; Miyazaki, Kazuhisa; Kashiwa, Norio

PA Mitsui Chemicals Inc., Japan

SO Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C08F008-00

ICS C08F299-00

CC 35-8 (Chemistry of Synthetic High Polymers)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1396504	A2	20040310	EP 2003-19527	20030829
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2004143403	A2	20040520	JP 2003-104171	20030408
PRAI	JP 2002-254839	A	20020830		
AB	A graft polymer with various uses having a polyolefin backbone having polyolefin segments excellent in moldability can be obtained by homo- or copolymerizing a polyolefin macromonomer, wherein the macromonomer has at the terminal of its polyolefin chain a vinyl group whose α -position may be substituted, and the macromonomer can be efficiently obtained by a method, for example, successively carrying out (i) a step of producing a polyolefin having a hydroxyl group at the terminal of the polyolefin chain and (ii) a step of converting the terminal hydroxyl group of the polyolefin chain into an acryloyl group, a methacryloyl group or a styryl group.				
ST	polyolefin macromer graft polymer compatibilizer				
IT	Aluminoxanes				
	RL: CAT (Catalyst use); USES (Uses)				
	(Me; polyolefin macromonomer, graft polymer obtained from the polyolefin macromonomer, and use thereof)				
IT	Polymerization catalysts				
	(coordination; polyolefin macromonomer, graft polymer obtained from the polyolefin macromonomer, and use thereof)				
IT	Polyolefins				
	RL: IMF (Industrial manufacture); PREP (Preparation)				
	(macromonomer; polyolefin macromonomer, graft polymer obtained from the polyolefin macromonomer, and use thereof)				
IT	Polymerization catalysts				
	(metallocene; polyolefin macromonomer, graft polymer obtained from the				

- polyolefin macromonomer, and use thereof)
- IT Polymer blend compatibilizers
(polyolefin macromonomer, graft polymer obtained from the polyolefin macromonomer, and use thereof)
- IT Transition metal compounds
RL: CAT (Catalyst use); USES (Uses)
(polyolefin macromonomer, graft polymer obtained from the polyolefin macromonomer, and use thereof)
- IT Macromonomers
RL: IMF (Industrial manufacture); PREP (Preparation)
(polyolefin; polyolefin macromonomer, graft polymer obtained from the polyolefin macromonomer, and use thereof)
- IT Plastics, uses
RL: POF (Polymer in formulation); USES (Uses)
(thermoplastics; polyolefin macromonomer, graft polymer obtained from the polyolefin macromonomer, and use thereof)
- IT 920-46-7DP, Methacryloylchloride, reaction products with hydroxy-terminated polyolefins 1592-20-7DP, p-Vinyl benzyl chloride, reaction products with hydroxy-terminated polyolefins 25085-53-4DP, Isotactic polypropylene, vinylidene group-terminated, oxidized, methacrylates
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(macromonomer; polyolefin macromonomer, graft polymer obtained from the polyolefin macromonomer, and use thereof)
- IT 84-69-5, Diisobutyl phthalate 85-44-9, Phthalic anhydride 97-93-8, Triethyl aluminum, uses 104-76-7, 2-Ethylhexyl alcohol 1291-32-3, Dicyclopentadienyl zirconiumdichloride 7550-45-0, Titanium tetrachloride, uses 7786-30-3, Magnesium chloride, uses 17865-32-6, Cyclohexyl methyl dimethoxy silane 479508-30-0
RL: CAT (Catalyst use); USES (Uses)
(polyolefin macromonomer, graft polymer obtained from the polyolefin macromonomer, and use thereof)
- IT 106335-28-8P, Ethylene-methyl methacrylate -propylene graft copolymer
RL: IMF (Industrial manufacture); PREP (Preparation)
(polyolefin macromonomer, graft polymer obtained from the polyolefin macromonomer, and use thereof)
- IT 9002-88-4DP, Polyethylene, vinylidene group-terminated, oxidized, methacrylates 9010-79-1DP, vinylidene group-terminated, oxidized, methacrylates
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(polyolefin macromonomer, graft polymer obtained from the polyolefin macromonomer, and use thereof)

L125 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:10016 CAPLUS

DN 136:70686

ED Entered STN: 04 Jan 2002

TI Foamable poly(meth)acrylate plastisol and manufacturing process

IN Loehden, Gerd; Belzner, Winfried; Geyer, Hans-Juergen; Rausch, Ursula; Traebing, Mauren

PA Rohm G.m.b.H. & Co. K.-G., Germany

SO Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DT Patent

LA German

IC ICM C08L033-06

ICS C08J009-10

CC 37-6 (Plastics Manufacture and Processing)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1167445	A2	20020102	EP 2001-114186	20010612
	EP 1167445	A3	20020821		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	DE 10029735	A1	20020110	DE 2000-10029735	20000623
PRAI	DE 2000-10029735	A	20000623		
AB	A plastisol with improved rebound resilience, storage stability and compatibility with plasticizers is composed of (meth)acrylate (co)polymers, plasticizers, fillers, blowing agents, starting agents and other additives. At least a part of (meth)acrylate (co)polymers comprises core-shell (co)polymers with core having weight-average mol. weight 10,000-1,000,000 and shell having weight-average mol. weight >1,000,000. Such (co)polymers were manufactured by radical emulsion polymerization involving controlled use of mol. weight regulator, e.g., n-dodecylmercaptan during the polymerization				
ST	plastisol foamable core shell polymethyl methacrylate manuf; core shell PMMA manuf mol wt regulator; dodecylmercaptan chain transfer agent core shell PMMA manuf				
IT	Plastics, preparation RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (cellular; foamable plastisol from core-shell PMMA prepared by emulsion polymerization involving use of mol. weight regulator)				
IT	Polymerization (emulsion; foamable plastisol from core-shell PMMA prepared by emulsion polymerization involving use of mol. weight regulator)				
IT	Chain transfer agents (foamable plastisol from core-shell PMMA prepared by emulsion polymerization involving use of mol. weight regulator)				
IT	Plastic foams RL: TEM (Technical or engineered material use); USES (Uses) (foamable plastisol from core-shell PMMA prepared by emulsion polymerization involving use of mol. weight regulator)				
IT	Coating materials Floor coverings (foamable plastisol from core-shell PMMA with improved rebound resilience and storage stability for use as)				
IT	9011-14-7P , Poly(methyl methacrylate) RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (core-shell; foamable plastisol from core-shell PMMA prepared by emulsion polymerization involving use of mol. weight regulator)				
IT	112-55-0, n-Dodecylmercaptan RL: NUU (Other use, unclassified); USES (Uses) (mol. weight regulator; foamable plastisol from core-shell PMMA prepared by emulsion polymerization involving use of mol. weight regulator)				
IT	84-69-5 , Diisobutyl phthalate 84-74-2 , Dibutyl phthalate 84-75-3 , Dihexyl phthalate 84-76-4 , Dinonyl phthalate 84-77-5 , Didecyl phthalate 85-68-7 , Butyl benzyl phthalate 88-99-3D , 1,2-Benzenedicarboxylic acid, C7-9-alkyl esters 88-99-3D , 1,2-Benzenedicarboxylic acid, C9-11-alkyl esters 117-81-7 , Dioctyl phthalate 2432-90-8 , Didodecyl phthalate 3648-20-2 , Diundecyl phthalate 3648-21-3 , Diheptyl phthalate 26761-40-0 , Diisodecyl				

phthalate 27554-26-3, Diisooctyl phthalate 28553-12-0, Diisononyl
 phthalate 36901-61-8, Diisotridecyl phthalate 41451-28-9, Diisoheptyl
 phthalate 70992-65-3, Santicizer 261 96507-86-7, Diisoundecyl
 phthalate 116998-09-5, Dodecyl undecyl phthalate

RL: TEM (Technical or engineered material use); USES (Uses)

(plasticizer; foamable plastisol from core-shell PMMA prepared by
 emulsion polymerization involving use of mol. weight regulator)

L125 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:798159 CAPLUS

DN 135:348046

ED Entered STN: 02 Nov 2001

TI Basic-medium-soluble polymeric packaging material for use in castable
 concrete, shotcrete, or grout

IN Rieder, Klaus-Alexander; Hurley, William J., Jr.; Ranganathan,
 Anandakumar; Macklin, Michael B.

PA W.R. Grace & Co.-Conn., USA

SO PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C04B018-02

CC 58-3 (Cement, Concrete, and Related Building Materials)

Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001081265	A2	20011101	WO 2001-US13532	20010426
	WO 2001081265	A3	20040325		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 6348093	B1	20020219	US 2000-559624	20000427
	JP 2003531043	T2	20031021	JP 2001-578365	20010426
	EP 1421039	A2	20040526	EP 2001-928917	20010426
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR			

PRAI US 2000-559624 A 20000427

WO 2001-US13532 W 20010426

AB The packaging system comprises a non-water-soluble, basic-medium-soluble polymeric material dissolved in a castable cementitious compns. especially ready-mix concrete or shotcrete. Exemplary packaging can be introduced in a sealed form directly into a mixer, whereby, upon agitation of the mixer, a cementitious binder, admixts., and/or fibers can be released to make or modify in the mixer, a castable cementitious composition within which the packaging material, which is made of a non-water-soluble, basic-medium-soluble polymeric material, can disappear from sight. Said polymeric material is prepared from a monomer mixture comprising an ester and an acid (e.g., copolymer of Et acrylate and methacrylic acid) employed in a ratio of 3:1 to 4:1. Said basic-medium-soluble packaging has a torpedo shape. The cementitious material selected from Portland cement, gypsum, limestone, silica fume, blast furnace slag, pozzolans, and fly ash.

ST cement concrete shotcrete polymer packaging soluble

IT Packaging materials
(basic-medium-soluble polymeric; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)

IT Slags
(blast-furnace, component of cementitious compns.; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)

IT Concrete Mortar
(castable cementitious compns.; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)

IT Fibers
RL: TEM (Technical or engineered material use); USES (Uses)
(cellulosic, filler in packaging material; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)

IT Limestone, processes
RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(component of cementitious compns.; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)

IT Clays, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(component of packaging material; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)

IT Polyolefin fibers
RL: TEM (Technical or engineered material use); USES (Uses)
(ethylene, filler in packaging material; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)

IT Carbon fibers, uses
Glass fibers, uses
Kaolin, uses
Mica-group minerals, uses
Polyamide fibers, uses
Polyester fibers, uses
Polypropene fibers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(filler in packaging material; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)

IT Ashes (residues)
(fly, component of cementitious compns.; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)

IT Polymers, processes
RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(non-water-soluble, basic-medium-soluble; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)

IT Grout
(oil well cementing grouts; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)

IT Cement (construction material)
(portland, component of cementitious compns.; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)

IT Mortar
(shotcrete, castable cementitious compns.; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)

IT Ethers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(vinyl, basic-medium-soluble component of packaging material; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)

- IT 7631-86-9, Silica fume, uses
RL: MOA (Modifier or additive use); USES (Uses)
(amorphous, fume, component of cementitious compns.; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)
- IT 25212-88-8, Ethyl acrylate-methacrylic acid copolymer
RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(basic-medium-soluble component of packaging material; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)
- IT 97-88-1, Butyl methacrylate 100-42-5, Styrene, uses 109-53-5, Vinyl isobutyl ether 10344-93-1, Acrylate, uses 18358-13-9, Methacrylate, uses 32360-05-7, Stearyl methacrylate
RL: TEM (Technical or engineered material use); USES (Uses)
(basic-medium-soluble component of packaging material; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)
- IT 13397-24-5, Gypsum, processes
RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(component of cementitious compns.; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)
- IT 471-34-1, Calcium carbonate, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(component of packaging material; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)
- IT 7727-43-7, Barium sulfate 7757-93-9 14807-96-6, Talc, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(filler in packaging material; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)
- IT 141-32-2, Butyl acrylate
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(film-forming component, basic-medium-soluble component of packaging material; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)
- IT 80-62-6, (Methyl)methacrylate 96-33-3, Methyl acrylate 140-88-5, Ethyl acrylate
RL: MOA (Modifier or additive use); USES (Uses)
(film-forming component; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)
- IT 84-69-5, Diisobutyl phthalate 26761-40-0, Diisodecyl phthalate
RL: TEM (Technical or engineered material use); USES (Uses)
(plasticizer; basic-medium-soluble polymeric packaging material for use in castable concrete or shotcrete)

L125 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:545760 CAPLUS

DN 135:137856

ED Entered STN: 27 Jul 2001

TI Olefin block copolymers with linking groups, production processes of the same and use thereof

IN Ota, Seiji; Moriya, Satoru; Mori, Ryoji; Koda, Taku; Tan, Junji; Kojoh, Shinichi; Kaneko, Hideyuki; Hama, Shunichi; Nobori, Tadahito; Matsugi, Tomoaki; Kashiwa, Norio

PA Mitsui Chemicals, Inc., Japan

SO PCT Int. Appl., 563 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC C08F293-00; C08G081-00; C08L053-00; C08L101-00

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 39

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001053369	A1	20010726	WO 2001-JP298	20010118
	W: CN, KR, SG, US				
	RW: DE, FR, GB				
	JP 2002097237	A2	20020402	JP 2000-288181	20000922
	EP 1275670	A1	20030115	EP 2001-942647	20010118
	R: DE, FR, GB				
	JP 2001278928	A2	20011010	JP 2001-16069	20010124
	JP 2001278929	A2	20011010	JP 2001-16070	20010124
	JP 2001278930	A2	20011010	JP 2001-18285	20010126
	JP 2001278931	A2	20011010	JP 2001-18299	20010126
	JP 2001278932	A2	20011010	JP 2001-18300	20010126
	JP 2001288443	A2	20011016	JP 2001-25809	20010201
	JP 2001288372	A2	20011016	JP 2001-25810	20010201
	JP 2001288272	A2	20011016	JP 2001-25811	20010201
	JP 2001342256	A2	20011211	JP 2001-76944	20010316
	JP 2001348413	A2	20011218	JP 2001-106007	20010404
	JP 2002012639	A2	20020115	JP 2001-106006	20010404
	JP 2002037825	A2	20020206	JP 2001-141562	20010511
	JP 2002053632	A2	20020219	JP 2001-141561	20010511
	US 2003055179	A1	20030320	US 2002-181553	20020719
PRAI	JP 2000-17848	A	20000121		
	JP 2000-17849	A	20000121		
	JP 2000-17850	A	20000121		
	JP 2000-18053	A	20000125		
	JP 2000-18054	A	20000125		
	JP 2000-23333	A	20000127		
	JP 2000-24736	A	20000128		
	JP 2000-24737	A	20000128		
	JP 2000-28924	A	20000201		
	JP 2000-28925	A	20000201		
	JP 2000-28926	A	20000201		
	JP 2000-90716	A	20000327		
	JP 2000-111900	A	20000407		
	JP 2000-132859	A	20000427		
	JP 2000-147500	A	20000515		
	JP 2000-166470	A	20000531		
	JP 2000-288181	A	20000922		
	WO 2001-JP298	W	20010118		

AB The olefin block copolymers have excellent in affinity with metal, polar resins or the like, impact resistance, mar resistance, thermal resistance, rigidity, oil resistance, transparency, antifogging properties, elec. insulation properties, breakdown voltage, application properties, low-temperature flexibility, moldability, environmental degradation properties, fluidity and/or dispersion properties. The block copolymers are of PO1-gl-B1 type (wherein PO1 is a segment composed of repeating units derived from C2-20 olefin; gl is an ester, ether, amide, imide, urethane, urea, silyl ether, or carbonyl linkage; and B1 is an unsatd. hydrocarbon or heteroatom-containing segment), and are useful for hot-melt adhesives, moldings, modifiers for plastics and rubbers, etc. Thus, a copolymer with O linking group was prepared, e.g., by metallocene polymerization of ethylene with norbornene, followed by converting the resulting single-end unsatd. group-terminated copolymer to a B-terminated copolymer using 9-BBN (9-borabicyclononane), and block copolymn. in THF with styrene in the

- presence of O.
- ST impact resistance block olefin copolymer; transparency olefin diblock copolymer; elec insulation transparency olefin block copolymer; flexibility transparency olefin block copolymer; breakdown voltage transparency olefin block copolymer; heat resistance transparency olefin block copolymer; antifogging transparency olefin block copolymer; polymer end modification diblock olefin copolymer
- IT Aluminoxanes
RL: CAT (Catalyst use); USES (Uses)
(Me, polymerization catalyst; polymer end conversion in manufacture of olefin diblock copolymers and various uses in plastics and rubbers)
- IT Polymerization
(Ziegler-Natta; polymer end conversion in manufacture of olefin diblock copolymers for use in plastics and rubbers)
- IT Polymerization
(anionic; polymer end conversion in manufacture of olefin diblock copolymers for use in plastics and rubbers)
- IT Polymers, preparation
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(biodegradable, block polycaprolactone-polyolefins; polymer end conversion in manufacture of olefin diblock copolymers for use in plastics and rubbers)
- IT Styrene-butadiene rubber, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(blend polymer; Nipol 150; polymer end conversion in manufacture of olefin diblock copolymers and various uses in plastics and rubbers)
- IT Polymers, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(block; polymer end conversion in manufacture of olefin diblock copolymers for use in plastics and rubbers)
- IT Synthetic rubber, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dimethyldecatriene-ethylene-Me methacrylate-propylene, block; polymer end conversion in manufacture of olefin diblock copolymers for use in plastics and rubbers)
- IT EPDM rubber
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(ethylene-ethylidenenorbornene-propene, EPT 3070 for blend; polymer end conversion in manufacture of olefin diblock copolymers for use in plastics and rubbers)
- IT Adhesives
(hot-melt; polymer end conversion in manufacture of olefin diblock copolymers and various uses in plastics and rubbers)
- IT Polymerization
(ionic; polymer end conversion in manufacture of olefin diblock copolymers and various uses in plastics and rubbers)
- IT Polymerization catalysts
(metallocene; polymer end conversion in manufacture of olefin diblock copolymers and various uses in plastics and rubbers)
- IT Polyolefins
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP

(Preparation); USES (Uses)
 (polyamide-, block; polymer end conversion in manufacture of olefin diblock copolymers for use in plastics and rubbers)

IT Polyolefins
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (polyester-, block; polymer end conversion in manufacture of olefin diblock copolymers for use in plastics and rubbers)

IT Laminated plastics, uses
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (polymer end conversion in manufacture of olefin diblock copolymers and various uses in plastics and rubbers)

IT Boronizing
 Bottles
 Coating materials
 Containers
 Inks
 Oxidation
 Pipes and Tubes
 Plastic films
 Polymer electrolytes
 Sealing compositions
 Transparent materials
 (polymer end conversion in manufacture of olefin diblock copolymers for use in plastics and rubbers)

IT Plastic foams
 Polymer blends
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (polymer end conversion in manufacture of olefin diblock copolymers for use in plastics and rubbers)

IT Polyamides, preparation
 Polyesters, preparation
 Polyoxyalkylenes, preparation
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (polyolefin-, block; polymer end conversion in manufacture of olefin diblock copolymers for use in plastics and rubbers)

IT Polyolefins
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (polyoxyalkylene-, block; polymer end conversion in manufacture of olefin diblock copolymers for use in plastics and rubbers)

IT Polymerization
 (radical; polymer end conversion in manufacture of olefin diblock copolymers for use in plastics and rubbers)

IT Polyesters, miscellaneous
 RL: MSC (Miscellaneous)
 (test substrate; polymer end conversion in manufacture of olefin diblock copolymers and various uses in plastics and rubbers)

IT 108-31-6D, Maleic anhydride, reaction products with ethylene-propylene copolymer 9010-79-1, Ethylene-propylene copolymer **9011-87-4**, Acrypet MD 25213-02-9, Ethylene-1-hexene copolymer 106565-43-9, Ethylene-propylene block copolymer
 RL: POF (Polymer in formulation); TEM (Technical or engineered material

- use); USES (Uses)
 (blend polymer; olefinic polymer end conversion in manufacture of block copolymers and various uses in plastics and rubbers)
- IT 25895-47-0P, Butene-ethylene-propylene copolymer
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (blend polymers; olefinic polymer end conversion in manufacture of block copolymers and various uses in plastics and rubbers)
- IT **350846-86-5P**
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (crosslinked; olefinic polymer end conversion in manufacture of block copolymers and various uses in plastics and rubbers)
- IT **110341-23-6DP, Methyl methacrylate-propylene**
 block copolymer, hydroxy-terminated
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (diblock intermediate; olefinic polymer end conversion in manufacture of block copolymers and various uses in plastics and rubbers)
- IT **350846-84-3P**
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (diblock, rubber; olefinic polymer end conversion in manufacture of block copolymers and various uses in plastics and rubbers)
- IT **351471-96-0DP, isocyanate-terminated**
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (diblock; intermediate; olefinic polymer end conversion in manufacture of block copolymers and various uses in plastics and rubbers)
- IT 155416-71-0DP, butene-ethylene-propylene block copolymer, isocyanate-terminated **185630-56-2DP**, butyl acrylate-propylene block copolymer, hydroxy-terminated
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (diblock; intermediate; polymer end conversion in manufacture of olefin diblock copolymers and various uses in plastics and rubbers)
- IT 249728-97-0DP, ethylene-1-hexene block copolymer, carboxy-terminated
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (diblock; intermediate; polymer end conversion in manufacture of olefin diblock copolymers for use in plastics and rubbers)
- IT 126140-91-8P, Ethylene-ethylene oxide block copolymer 127471-92-5P, Maleic anhydride-propylene-styrene block copolymer **188448-09-1P**, Ethylene-methyl methacrylate-propylene block copolymer 350846-74-1P 350846-75-2P **350846-76-3P 350846-77-4P** 350846-78-5P **351471-95-9DP**, amine-terminated
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (diblock; olefinic polymer end conversion in manufacture of block copolymers and various uses in plastics and rubbers)
- IT **110341-23-6P, Methyl methacrylate-propylene**
 block copolymer 141551-66-8P, ε-Caprolactone-ethylene block copolymer **185630-55-1P**, Ethyl methacrylate-propylene block copolymer **185630-56-2P**, Butyl acrylate-propylene block copolymer **330665-83-3P**, Butyl acrylate-ethylene block copolymer

- 350846-83-2P 350846-85-4P 350846-87-6P 350846-88-7P
350846-89-8P 350846-90-1P 350846-91-2P **351471-97-1P**,
Ethylene-methyl methacrylate-1-octene block copolymer
351471-98-2P 351471-99-3P **351472-00-9P**
351472-01-0P 351472-02-1P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
(Properties); TEM (Technical or engineered material use); PREP
(Preparation); USES (Uses)
(diblock; olefinic polymer end conversion in manufacture of block copolymers
and various uses in plastics and rubbers)
- IT 26628-22-8, Sodium azide
RL: MOA (Modifier or additive use); USES (Uses)
(end group former; olefinic polymer end conversion in manufacture of block
copolymers and various uses in plastics and rubbers)
- IT 280-64-8, 9-Borabicyclononane
RL: MOA (Modifier or additive use); RCT (Reactant); RACT (Reactant or
reagent); USES (Uses)
(hydroboration agents for polymers; olefinic polymer end conversion
in manufacture of block copolymers and various uses in plastics and rubbers)
- IT 9010-79-1DP, Ethylene-propylene copolymer, boron-terminated or
organoaluminum oxy-terminated; or maleated
RL: IMF (Industrial manufacture); POF (Polymer in formulation); RCT
(Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(intermediate; olefinic polymer end conversion in manufacture of block
copolymers and various uses in plastics and rubbers)
- IT 9002-88-4DP, Polyethylene, boron-terminated 25213-02-9DP,
Ethylene-1-hexene copolymer, boron- or carboxy-terminated 25213-96-1DP,
Ethylene-4-methyl-1-pentene copolymer, boron-terminated 26007-43-2DP,
Ethylene-norbornene copolymer, boron-terminated 26221-73-8DP,
Ethylene-1-octene copolymer, boron-terminated or hydroxy-terminated
29160-11-0DP, Syndiotactic ethylene-propylene copolymer, boron-terminated
252210-67-6DP, 4,8-Dimethyl-1,4,8-decatriene-ethylene-propylene copolymer,
boron-terminated
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(intermediate; olefinic polymer end conversion in manufacture of block
copolymers and various uses in plastics and rubbers)
- IT 9003-07-0DP, polypropylene, boron-terminated 25213-02-9DP,
ethylene-1-hexene copolymer, boron-terminated
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(intermediate; polymer end conversion in manufacture of olefin diblock
copolymers and various uses in plastics and rubbers)
- IT 96-10-6, diethylaluminum chloride, uses
RL: MOA (Modifier or additive use); USES (Uses)
(modifier for polymer; polymer end conversion in manufacture of olefin
diblock copolymers and various uses in plastics and rubbers)
- IT **350846-81-0P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
(Properties); TEM (Technical or engineered material use); PREP
(Preparation); USES (Uses)
(multiblock; olefinic polymer end conversion in manufacture of block
copolymers and various uses in plastics and rubbers)
- IT **350846-79-6P**
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP
(Properties); TEM (Technical or engineered material use); PREP
(Preparation); USES (Uses)
(olefinic polymer end conversion in manufacture of block copolymers and
various uses in plastics and rubbers)

- IT 7722-84-1, Hydrogen peroxide, uses
RL: MOA (Modifier or additive use); USES (Uses)
(oxidation agent; olefinic polymer end conversion in manufacture of block copolymers and various uses in plastics and rubbers)
- IT 100-99-2, Triisobutylaluminum, uses 1109-15-5,
Tris(pentafluorophenyl)borane 1291-32-3, Biscyclopentadienylzirconium dichloride 67108-80-9, Dimethylbis(pentamethyl- η 5-cyclopentadienyl)zirconium 119445-92-0, Bis(1,3-dimethylcyclopentadienyl)zirconium dichloride 136040-19-2, Triphenylcarbenium tetrakis(pentafluorophenyl)borate 151840-68-5 167158-72-7 195212-01-2, Tetrakis[tris(dimethylamino)phosphoranylideneamino]phosphonium hydroxide
RL: CAT (Catalyst use); USES (Uses)
(polymerization catalyst; olefinic polymer end conversion in manufacture of block copolymers and various uses in plastics and rubbers)
- IT 84-69-5, diisobutyl phthalate 85-44-9, phthalic anhydride 97-93-8, triethylaluminum, uses 104-76-7, 2-ethylhexyl alcohol 7550-45-0, titanium tetrachloride, uses 7722-64-7, potassium permanganate 7786-30-3, magnesium chloride, uses 17865-32-6, cyclohexylmethyldimethoxysilane 119821-97-5, dimethylsilylenebis(indenyl)zirconium dichloride 159572-59-5, meso-dimethylsilylenebis(2-methyl-4-phenylindenyl)zirconium dichloride 168749-23-3
RL: CAT (Catalyst use); USES (Uses)
(polymerization catalyst; polymer end conversion in manufacture of olefin diblock copolymers and various uses in plastics and rubbers)
- IT 135072-61-6, (tert-Butylamido)dimethyl(tetramethyl- η 5-cyclopentadienyl)silanetitanium dichloride
RL: CAT (Catalyst use); USES (Uses)
(polymerization catalyst; polymer end conversion in manufacture of olefin diblock copolymers for use in plastics and rubbers)
- IT 109-72-8, butyllithium, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; polymer end conversion in manufacture of olefin diblock copolymers and various uses in plastics and rubbers)
- IT 9003-55-8
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(styrene-butadiene rubber, blend polymer; Nipol 150; polymer end conversion in manufacture of olefin diblock copolymers and various uses in plastics and rubbers)
- IT 25038-59-9, PET polyester, miscellaneous
RL: MSC (Miscellaneous)
(test substrate; polymer end conversion in manufacture of olefin diblock copolymers and various uses in plastics and rubbers)
- IT 350846-82-1P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(triblock, star, 4-arm; olefinic polymer end conversion in manufacture of block copolymers and various uses in plastics and rubbers)
- IT 350846-80-9P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(triblock; olefinic polymer end conversion in manufacture of block

copolymers and various uses in plastics and rubbers)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Kuraray Co, Ltd; JP 2001-059007 A 2001 CAPLUS
- (2) Mitsubishi Petrochemical Co, Ltd; JP 04-149236 A 1992 CAPLUS
- (3) Mitsubishi Petrochemical Co, Ltd; JP 05-125194 A 1993 CAPLUS

L125 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:932550 CAPLUS

DN 136:54928

ED Entered STN: 27 Dec 2001

TI Propylene polymer sheets with good high-frequency welding properties

IN Yamamoto, Toshiki; Maekawa, Akinori; Nakajima, Takanori

PA Chisso Corp., Japan; Chisso Sekiyu Kagaku K. K.

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08L023-14

ICS B32B027-32; C08J005-18; C08L023-08; C08L023-16; C08L023-18

CC 38-3 (Plastics Fabrication and Uses)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001354814	A2	20011225	JP 2000-181353	20000616
	DE 10124759	A1	20020110	DE 2001-10124759	20010521
	US 2002019489	A1	20020214	US 2001-863951	20010523
	US 6495632	B2	20021217		
	US 6555244	B1	20030429	US 2002-236453	20020906
PRAI	JP 2000-181353	A	20000616		
	US 2001-863951	A3	20010523		

AB The sheets, useful for packaging materials, etc., comprise (A) 50-99% propylene polymer compns. containing (a) crystalline propylene polymers (PP) and

(b) propylene- α -olefin copolymers (RC) satisfying relationships of $IV_{rc} \leq 6.5$ dL/g, IV_{rc}/IV_{pp} 0.6-1.2, and $(IV_{rc}/IV_{pp}) + (W_{pp}/W_{rc})$ 0.2-4.5 (IV_{rc} , IV_{pp} = intrinsic viscosity of RC and PP, resp., W_{rc} , W_{pp} = weight of RC and PP, resp.) and (B) 1-50% ethylene copolymers with cohesive energy d. 60-90 cal/cm³ and peak of dielec. loss tangent ($\tan \delta$; 100 kHz) $\geq 5.0 + 10^{-3}$. Thus, a composition containing (a) 55% 1:1 mixture of ethylene-propylene copolymer (I; propylene content 97%, IV_{pp} 1.8 dL/g) and I (ethylene content 36 %, IV_{rc} 1.8 g/dL) and (b) 45% Acryft MW 403 (ethylene-Me methacrylate copolymer) with cohesive energy d. 84.2 cal/cm³ and $\tan \delta$ 45.1 + 10⁻³ was extruded to give a sheet with haze 3.5%, good cold and impact resistance, and pencil hardness 4B.

ST ethylene propylene methyl methacrylate polymer sheet

welding; packaging cold impact resistance propylene sheet

IT Impact-resistant materials

(cold-resistant; propylene polymer sheets with good high-frequency welding properties)

IT Cold-resistant materials

(impact-resistant; propylene polymer sheets with good high-frequency welding properties)

IT Polymer blends

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(propylene polymer sheets with good high-frequency welding properties)

IT Packaging materials

(sheets; propylene polymer sheets with good high-frequency welding

properties)
 IT **25101-13-7P**, Ethylene-methyl methacrylate
 copolymer
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
 (Properties); TEM (Technical or engineered material use); PREP
 (Preparation); USES (Uses)
 (Acryft MW 403; propylene polymer sheets with good high-frequency
 welding properties)
 IT 7786-30-3, Magnesium chloride, uses
 RL: CAT (Catalyst use); USES (Uses)
 (catalyst support; propylene polymer sheets with good high-frequency
 welding properties)
 IT **84-69-5**, Diisobutyl phthalate 97-93-8, Triethylaluminum, uses
 7550-45-0, Titanium tetrachloride, uses 18230-61-0,
 Diisopropyldimethoxysilane
 RL: CAT (Catalyst use); USES (Uses)
 (propylene polymer sheets with good high-frequency welding properties)
 IT 9010-79-1P, Ethylene-propylene copolymer 25895-47-0P,
 1-Butene-ethylene-propylene copolymer
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
 (Properties); TEM (Technical or engineered material use); PREP
 (Preparation); USES (Uses)
 (propylene polymer sheets with good high-frequency welding properties)

L125 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:133608 CAPLUS

DN 134:194121

ED Entered STN: 23 Feb 2001

TI Poly(meth)acrylate plastisols with improved plasticizer compatibility,
 procedure for their production as well as use

IN Loehden, Gerd

PA Rohm G.m.b.H., Germany

SO Ger., 12 pp.

CODEN: GWXXAW

DT Patent

LA German

IC ICM C08L033-08

ICS C08L033-10; C08L033-12; C08J003-18; C08K005-10

CC 37-6 (Plastics Manufacture and Processing)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	DE 19928353	C1	20010222	DE 1999-19928353	19990621
PRAI	DE 1999-19928353		19990621		

AB Plastisols contain (1) ≥ 1 polymer prepared by polymerization of mixts.
 containing (a) 20-100% Me methacrylate, (b) 0-80% CH₂:CR₁CO₂R₂ (R₁ = H or Me,
 R₂ = C₁-18 alkyl, C_{≤18} cycloalkyl, Ph, or naphthyl), 0-40% vinyl
 unsatd. monomer different than (a) and (b), and 0-50% adhesion-improving
 monomer; (2) 5-400 parts [based on 100 parts (1)] ester plasticizer with
 the alc. portion being different than at least a portion of the alc.
 portion of (1), (3) 0-700 parts [based on 100 parts (1)] filler, and (4)
 ≥ 1 catalysts for causing transesterification of at least a portion
 of (1) with at least a portion of (2) at temps. between room and plastisol
 gelation temps.

ST **methyl methacrylate** polymer plastisol
 transesterification catalyst; plasticizer compatibility enhancement

methyl methacrylate polymer

IT Plasticizers

Transesterification catalysts

(poly(meth)acrylate plastisols containing transesterification catalysts for improved plasticizer compatibility)

IT 77-58-7, Dibutyltin dilaurate 546-68-9, Titanium tetraisopropylate 818-08-6, Dibutyltin oxide 5593-70-4, Titanium tetrabutylate

RL: CAT (Catalyst use); USES (Uses)

(poly(meth)acrylate plastisols containing transesterification catalysts for improved plasticizer compatibility)

IT 9011-14-7P, PMMA

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PREP (Preparation); USES (Uses)

(poly(meth)acrylate plastisols containing transesterification catalysts for improved plasticizer compatibility)

IT 84-69-5, Diisobutyl phthalate 84-74-2, Dibutyl phthalate 84-75-3, Dihexyl phthalate 84-76-4, Dinonyl phthalate 84-77-5, Didecyl phthalate 85-68-7, Benzyl butyl phthalate 117-81-7, DOP 117-84-0, Dioctyl phthalate 2432-90-8, Didodecyl phthalate 3648-20-2, Diundecyl phthalate 3648-21-3, Diheptyl phthalate 26761-40-0, Diisodecyl phthalate 27253-26-5, Diisotridecyl phthalate 27554-26-3, Diisooctyl phthalate 28553-12-0, Diisononyl phthalate 41451-28-9, Diisoheptyl phthalate 96507-86-7, Diisoundecyl phthalate 116998-09-5, Dodecyl undecyl phthalate

RL: MOA (Modifier or additive use); USES (Uses)

(poly(meth)acrylate plastisols containing transesterification catalysts for improved plasticizer compatibility)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Anon; DE 3442646 C2 CAPLUS

L125 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:631706 CAPLUS

DN 133:223901

ED Entered STN: 12 Sep 2000

TI Multilayered plastic sheets with high-frequency-weldability

IN Yamamoto, Toshiki; Nozokido, Yutaka; Kugimiya, Yoichi; Nakajima, Takanori; Akitaya, Shinichi; Okayama, Chikashi

PA Chisso Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B32B027-32

ICS B32B027-28

CC 38-3 (Plastics Fabrication and Uses)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000246853	A2	20000912	JP 1999-54399	19990302
PRAI	JP 1999-54399		19990302		

AB The sheets with A/B/A structure consist of A layer comprising crystalline propylene- α -olefin copolymers (PP; propylene content 90-99%, crystalline m.p. $\leq 160^\circ$) and propylene- α -olefin copolymers (RC; α -olefin content 10-55%) and B layer comprising ethylene polymers with cohesive energy d. 60-90 cal/cm³, melt flow rate (MFR) 1.0-15.0 g/10 min, crystalline m.p. 50-120 $^\circ$, Vicat softening point $\leq 100^\circ$, and peak dielec. loss tangent $\geq 5.0 + 10^{-3}$, where intrinsic viscosity (η) and weight ratio (W) of PP and RC in A layer satisfy the relationships of $\eta_{RC} \leq 6.5$ dL/g, $\eta_{RC}/\eta_{PP} = 0.6-1.2$, and $(\eta_{RC}/\eta_{PP}) + (W_{PP}/W_{RC}) = 0.2-4.5$. Thus, a composition containing ethylene-propylene copolymer (I; propylene

content 97%, η 1.8 dL/g, crystalline m.p. 145°) and I (ethylene content 36%, 1.8 dL/g) as A layer was laminated with EVA (Ultrathene 630; cohesive energy d. 68.7 cal/cm³, MFR 1.5 g/10 min, crystalline m.p. 90°, Vicat softening point 67°, loss tangent 16.1 + 10⁻³) as B layer to give a sheet showing loss tangent 14.9 + 10⁻³, haze 2.3%, Young's modulus of elasticity 147 MPa, pencil hardness 3B, and good adhesion by high-frequency-welding.

ST multilayer polyolefin film high frequency weldability; propylene ethylene copolymer EVA laminate transparency

IT Ethylene-vinyl acetate rubber
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (Ultrathene 634; multilayered plastic sheets with high-frequency-weldability)

IT Polymerization catalysts
 (Ziegler-Natta; multilayered plastic sheets with high-frequency-weldability)

IT Laminated plastic films
 Transparent films
 (multilayered plastic sheets with high-frequency-weldability)

IT Polyolefins
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (multilayered plastic sheets with high-frequency-weldability)

IT **84-69-5**, Diisobutyl phthalate 97-93-8, Triethylaluminum, uses 7550-45-0, Titanium tetrachloride, uses 7786-30-3, Magnesium chloride, uses 18230-61-0, Diisopropyldimethoxysilane
 RL: CAT (Catalyst use); USES (Uses)
 (catalyst; multilayered plastic sheets with high-frequency-weldability)

IT 24937-78-8
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (ethylene-vinyl acetate rubber, Ultrathene 634; multilayered plastic sheets with high-frequency-weldability)

IT 106565-43-9P, Ethylene-propylene block copolymer
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (multilayered plastic sheets with high-frequency-weldability)

IT **25101-13-7**, Ethylene-methyl methacrylate copolymer **26061-90-5**, Ethylene-glycidyl methacrylate copolymer **36604-80-5**, Ethylene-glycidyl methacrylate-vinyl acetate copolymer **41171-14-6**, Ethylene-ethyl acrylate-maleic anhydride copolymer
 RL: TEM (Technical or engineered material use); USES (Uses)
 (multilayered plastic sheets with high-frequency-weldability)

L125 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:669565 CAPLUS

DN 133:208702

ED Entered STN: 26 Sep 2000

TI Polymeric molding compound

IN Wang, Yufang; Tan, Tiemin

PA Beijing Academy of Architectural Material Sciences, Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 4 pp.
 CODEN: CNXXEV

DT Patent

LA Chinese

IC ICM B28B007-34
 ICS B29C033-40

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	CN 1245107	A	20000223	CN 1998-117513	19980818
	CN 1076261	B	20011219		
PRAI	CN 1998-117513		19980818		
AB	The polymeric molding compound is composed of epoxy resin 100, plasticizer 5-25, additive 5-20, O/W type emulsifier 5-40, water 150-250, and filler 300-600 part. The epoxy resin is selected from E51, E44, or E42. The plasticizer is selected from di-Me phthalate, di-Et phthalate, di-Bu phthalate, diisobutyl phthalate, Bu Ph phthalate, dimethoxyethyl phthalate, dipentyl phthalate, dioctyl phthalate, diheptyl phthalate, dioctyl isophthalate, tri-Et phosphate, tri-Bu phosphate, trioctyl phosphate, tri-Ph phosphate, tri(o-methylphenyl) phosphate, di-Et hexanedioate, dioctyl hexanedioate, dioctyl nonanedioate, or dioctyl decanedioate. The additive is selected from ethylenediamine, diethylenetriamine, triethylenetetramine, tetraethylenepentamine, polyethylenepolyamine, m-phenylenediamine, 1,3-bis(aminomethyl)benzene, or bis(4-aminophenyl)methane. The emulsifier with HLB of 13-15 is polyoxyethylene alkyl ether or polyoxyethylene alkylphenyl ether. The filler with particle size of 100-1,000 mesh is CaCO ₃ , talc, quartz, or poly(Me methacrylate).				
ST	epoxy resin molding compd; plasticizer epoxy resin molding compd; amine additive epoxy resin molding compd; calcium carbonate filler epoxy molding compd; talc filler epoxy molding compd; quartz filler epoxy molding compd; PMMA filler epoxy molding compd				
IT	Polyoxyalkylenes, uses RL: MOA (Modifier or additive use); USES (Uses) (alkyl ethers, emulsifiers; epoxy resin-based molding compds. containing)				
IT	Epoxy resins, uses RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses) (epoxy resin-based molding compds.)				
IT	Plasticizers (epoxy resin-based molding compds. containing)				
IT	Emulsifying agents (polyethylene glycol alkyl ethers; epoxy resin-based molding compds. containing)				
IT	Polyamines RL: MOA (Modifier or additive use); USES (Uses) (polyethylene-; epoxy resin-based molding compds. containing)				
IT	25322-68-3D, Polyethylene glycol, alkyl ethers RL: MOA (Modifier or additive use); USES (Uses) (emulsifiers; epoxy resin-based molding compds. containing)				
IT	25068-38-6, E44 25085-99-8, E51 37337-55-6, E42 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses) (epoxy resin-based molding compds.)				
IT	84-66-2, Diethyl phthalate 84-69-5, Diisobutyl phthalate 84-74-2, Dibutyl phthalate 101-77-9, Bis(4-aminophenyl)methane 107-15-3, Ethylenediamine, uses 108-45-2, 1,3-Benzenediamine, uses 111-40-0, Diethylenetriamine 112-24-3 112-57-2 471-34-1, Calcium carbonate, uses 1477-55-0, 1,3-Bis(aminomethyl)benzene 9011-14-7 , Poly(methyl methacrylate) 14807-96-6, Talc, uses 14808-60-7, Quartz, uses RL: MOA (Modifier or additive use); USES (Uses) (epoxy resin-based molding compds. containing)				
IT	78-30-8, Tris(o-methylphenyl) phosphate 78-40-0, Triethyl phosphate				

78-42-2 103-23-1, Dioctyl adipate 103-24-2 115-86-6, Triphenyl phosphate 117-81-7, Dioctyl phthalate 117-82-8 122-62-3, Bis(2-ethylhexyl) decanedioate 126-73-8, Tributyl phosphate, uses 131-11-3, Dimethyl phthalate 131-18-0, Dipentyl phthalate 137-89-3, Dioctyl isophthalate 141-28-6, Diethyl hexanedioate 3648-21-3, Diheptyl phthalate 38411-12-0, Butyl phenyl phthalate

RL: MOA (Modifier or additive use); USES (Uses)

(plasticizers; epoxy resin-based molding compds. containing)

L125 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:144518 CAPLUS

DN 126:212477

ED Entered STN: 05 Mar 1997

TI Effect of reaction parameters on the polymerization of **methyl methacrylate** with nickel acetylacetonate/methyl aluminoxane

AU Coutinho, Fernanda M. B.; Costa, Marcos A. S.; Monteiro, Luciene F.; De Santa Maria, Luiz Claudio

CS Instituto Macromoleculas Professora Eloisa Mano, Universidade Federal Rio De Janeiro, Rio de Janeiro, 21945, Brazil

SO Polymer Bulletin (Berlin) (1997), 38(3), 303-309

CODEN: POBUDR; ISSN: 0170-0839

PB Springer

DT Journal

LA English

CC 35-3 (Chemistry of Synthetic High Polymers)

AB Reaction parameters in polymerization of Me methacrylate (MMA) employing Ni acetylacetonate [Ni(acac)₂] as catalyst combined with Me aluminoxane (MAO) as cocatalyst were investigated. Temperature of polymerization, Al/Ni mole ratio, type

of solvent, catalyst concentration, and time dependence were examined. The influence of Lewis bases on the polymerization was also studied. The binary system Ni(acac)₂/MAO was the only one able to polymerize MMA under the conditions employed (35°) in this study. The cocatalytic activity of MAO was compared to those of common alkylaluminum compds. The polymers were characterized by gel-permeation chromatog. and ¹³C-NMR techniques.

ST PMMA nickel acetylacetonate catalyst solvent base; solvent effect

methyl methacrylate polymn; Lewis base polymn catalyst nickel acetylacetonate

IT Aluminoxanes

RL: CAT (Catalyst use); USES (Uses)

(Me; effect of reaction parameters on polymerization of Me methacrylate with nickel acetylacetonate/Me aluminoxane)

IT Polymerization catalysts

Solvent effect

(effect of reaction parameters on polymerization of Me methacrylate with nickel acetylacetonate/Me aluminoxane)

IT Lewis bases

RL: NUU (Other use, unclassified); USES (Uses)

(effect of reaction parameters on polymerization of Me methacrylate with nickel acetylacetonate/Me aluminoxane)

IT **84-69-5**, Diiso-butyl phthalate 93-89-0, Ethyl benzoate

102-82-9, Tributylamine 142-96-1, Dibutyl ether 280-57-9, 1,4-Diaza-bicyclo[2.2.2]octane 768-66-1, 2,2,6,6-Tetramethylpiperidine

RL: NUU (Other use, unclassified); USES (Uses)

(Lewis base; effect of reaction parameters on polymerization of Me methacrylate with nickel acetylacetonate/Me aluminoxane)

IT 3264-82-2, Nickel acetylacetonate

RL: CAT (Catalyst use); USES (Uses)

(effect of reaction parameters on polymerization of Me methacrylate with

nickel acetylacetonate/Me aluminoxane)
IT **9011-14-7P**, PMMA
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(effect of reaction parameters on polymerization of Me methacrylate with
nickel acetylacetonate/Me aluminoxane)
IT 75-09-2, Dichloromethane, uses 108-88-3, Toluene, uses 109-99-9, THF,
uses 26635-64-3, Isooctane
RL: NUU (Other use, unclassified); USES (Uses)
(solvent; effect of reaction parameters on polymerization of Me methacrylate
with nickel acetylacetonate/Me aluminoxane)

L125 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1988:152333 CAPLUS
DN 108:152333
ED Entered STN: 30 Apr 1988
TI Influence of plasticizers on the impact resistance of modified wood
AU Nikolov, S.; Panaiotov, P.; Todorov, K.; Gradev, T.
CS Higher For. Tech. Inst., Sofia, Bulg.
SO Zeszyty Problemowe Postepow Nauk Rolniczych (1987), 313, 119-24
CODEN: ZPPRAW; ISSN: 0084-5477
DT Journal
LA Polish
CC 43-2 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 37, 38
AB In reinforcement of pinewood, by impregnating the samples with styrene, Me
methacrylate, or the polyesters Vinalkyd 550 (I) or PE-21 followed by
curing, the impact resistance of cured samples did not change very
significantly upon addition of plasticizing agents (diisobutyl phthalate,
vinyl acetate, acrylonitril, butadiene-styrene latex) to the impregnant.
However, all modified samples exhibited significantly higher impact
resistance than unmodified wood. The highest impact resistance was shown
by I-modified wood (72.43 kJ/m² vs. 28.10 kJ/m² for unmodified wood). The
relation between swelling of wood during impregnation and their impact
resistance after curing was discussed.
ST impact resistance reinforced plasticized pinewood; polystyrene pinewood
impact resistance; PMMA pinewood impact resistance; polyester pinewood
impact resistance
IT Plasticizers
(pinewood reinforced with polymers containing, impact resistance of)
IT Wood
(pine, polymer-reinforced, impact resistance of, plasticizer effect on)
IT Polyesters, uses and miscellaneous
RL: USES (Uses)
(unsatd., pinewood modified with, impact resistance of)
IT **25085-00-1, Methyl methacrylate**-vinyl acetate
copolymer 25213-29-0, Styrene-vinyl acetate copolymer 113606-46-5
113812-86-5
RL: USES (Uses)
(pinewood modified with, impact resistance of)
IT 9003-53-6, Polystyrene **9011-14-7**, PMMA
RL: USES (Uses)
(pinewood reinforced with, impact resistance of, plasticizer effect on)
IT **84-69-5**, Diisobutyl phthalate **9003-54-7**,
Acrylonitrile-styrene copolymer 9003-55-8, Butadiene-styrene copolymer
RL: MOA (Modifier or additive use); USES (Uses)
(plasticizers, pinewood modified with polymers containing, impact
resistance of)

L125 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1965:499494 CAPLUS
 DN 63:99494
 OREF 63:18385h,18386a
 ED Entered STN: 22 Apr 2001
 TI Decalcomania adhesive
 PA Letraset Ltd.
 SO 18 pp.
 DT Patent
 LA Unavailable
 CC 48 (Plastics Technology)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	BE 659042		19650517	BE	
	FR 1423437			FR	
	GB 1046411			GB	

PRAI GB 19640204

AB The adhesive consists of 31.5 g. of a 26% solution of poly(vinyl butyral) in BuOH, 19 g. of a dispersion of microcrystn. wax in mineral spirits, 5-20 g. of a 70% dispersion of poly(vinyl Et ether) in toluene, and 4.8-5.0 g. carbon black (or 17.5 g. TiO₂). They are used on paper impregnated with a silicone. Various other materials used in other formulations were 60% polyisobutylene latex, a poly(Me methacrylate) latex, hydroxyethyl cellulose, a polyethylene wax, a 20% rubber latex in mineral spirits, vinylite VYHH, diisobutyl phthalate, chlorinated paraffin wax, Et Cellosolve, and polyester resins. Surface active agents may also be incorporated.

IT Decalcomanias

(adhesive ink for, from pigments, resins and waxes)

IT Vinyl compound polymers

(butyrals, in adhesive ink for decalcomanias)

IT Adhesives

(decalcomania ink containing, from resins and waxes)

IT Ink

Ink

(for decalcomanias, from pigments, resins and waxes)

IT Paraffin wax and other hydrocarbon waxes

Rubber

(in decalcomania adhesive ink)

IT 557-05-1, Zinc stearate 637-12-7, Aluminum stearate

(adhesives (decalcomania) containing)

IT 9003-22-9, Ethylene, chloro-, polymer with vinyl acetate 9003-27-4,

Propene, 2-methyl- (isobutylene), homopolymer 9004-58-4, Cellulose,

ethyl hydroxyethyl ether 9011-14-7, Methyl

methacrylate polymers

(in decalcomania adhesive ink)

IT 84-69-5, Phthalic acid, diisobutyl ester

(in decalcomania adhesive polymers)

IT 109-53-5, Ether, isobutyl vinyl 109-92-2, Ether, ethyl vinyl

(polymers, in decalcomania adhesive ink)

IT 9002-88-4, Ethylene polymers

(waxes, in decalcomania adhesive ink)

=>